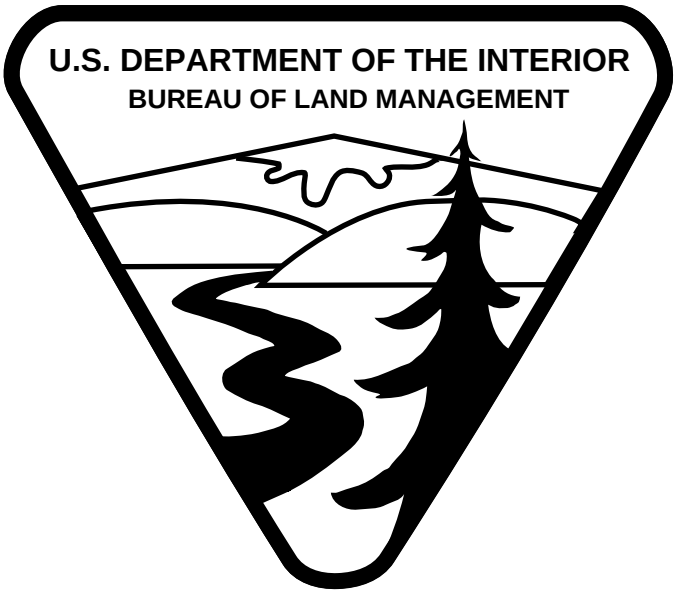
1999

ANNUAL PROGRAM SUMMARY
And Monitoring Report
for the

BLM EUGENE DISTRICT



FISCAL YEAR 1999
ANNUAL PROGRAM SUMMARY AND MONITORING REPORT
FOR
THE EUGENE DISTRICT

Table of Contents

Executive Summary 1
Budget 4
- PILT (Payments in Lieu of Taxes) 5
- O&C Payments 5
- Recreation Pipeline Funds 7
- Timber Sale Pipeline Funds 8
- Recreation Fee Demonstration Program 8
- Challenge Cost Share (CCS) 9

Employment Trends 10
All Land Use Allocations (LUAs) 14
Aquatic Conservation Strategy Implementation (ACS) 15
Late-Successional Reserves 17
Adaptive Management Areas 18
Matrix 19
Air Quality 20
Water and Soil 20
Wildlife Habitat 24
Fish Habitat 25
- Special Status Aquatic Species 25

Special Status and SEIS Special Attention Species (Animals) 26
- Candidate and Sensitive Species 27
- Survey and Manage Species 27
- Protection Buffer Species 28

Special Status Plant Species 29
Special Areas 29
- RNA/ACEC 29
- ACEC/ONA 29
- Wild & Scenic Eligible Rivers 30

Cultural Resources 31
Visual Resources 31
Rural Interface Areas 31
Socio-Economic 31
Environmental Justice 33
Recreation 34
Volunteers 35
Off-Highway Vehicle Management (OHV) 36
Developed Recreation Sites 37
Developed Trails 37
Special Recreation Management Areas (SRMA) 37
Extensive Recreation Management Area (ERMA) 37
Timber Resources 38
Silviculture 42
Special Forest Products (SFP) 43
Noxious Weeds 45
Fire/Fuels Management 46
Access and Rights-of-Way 47
Energy and Minerals 50
Land Tenure Adjustments 50

Hazardous Materials 52
Coordination and Consultation 52
Research and Education 53
Density Management Study 53
Bottomline Project 53
Perkins Creek Project 54
Ten High Project 54
Education 54
Information Resource Management 54
Cadastral Survey 55
Law Enforcement 55
NEPA (National Environmental Policy Act) Documentation and Planning 56
Monitoring 57

Glossary 60
Acronyms/Abbreviations 65

Appendix A - Summary of Plan Maintenance Actions Since 1995 66
Appendix B - Monitoring Report - Program Level 69
Appendix C - Monitoring - Project Level for FY99 82

TABLES

Table 1 - RMP Summary of Renewable Resource Management Actions, Directions and Accomplishments 3
Table 2 - RMP - Summary of Nonbiological Resource or Land Use Management Actions, Directions, and Accomplishments 4
Table 3 - Payments in Lieu of Taxes 5
Table 4 - O&C Payments to Counties - FY 1998 and 1999 7
Table 5 - Recreation Fee Demonstration Program Statistics 9
Table 6 - Challenge Cost Share Projects - FY 1999 10
Table 7 - Resident Labor Force, Employment by Industry, Oregon 12
Table 8 - Resident Labor Forces, Employment by Industry, Lane County 13
Table 9 - Realty Actions Affecting LUA Acreages 15
Table 10 - Major Land Allocation Acres 15
Table 11 - Riparian Reserve Stand Treatments (# acres treated) 16
Table 12 - Completed Watershed Analysis Areas 17
Table 13 - Summary of Non-flood Watershed Restoration Projects 17
Table 14 - Late-Successional Reserve Stand Treatments (Number of acres treated) 18
Table 15 - Central Cascades AMA Land Use Allocations under the Northwest Forest Plan 19
Table 16 - Summary of Eugene District Streams on the Final 1998 DEQ 303(d) List 21
Table 17 - Community Watersheds in the Eugene District 22
Table 18 - Total Number of SEIS Special Attention Plant Sites by Species Group 28
Table 19 - Total Number of Special Status Plant Sites by Species Group 29
Table 20 - Wild and Scenic Rivers Status 30
Table 21 - RMP - Summary of Socio-Economic Activities and Allocations 33
Table 22 - Recreation Program Statistics 35
Table 23 - Volunteers 35
Table 24 - Fee Demonstration Program 36
Table 25 - Special Recreation Management Areas 38
Table 26 - Harvest Volume (MMBF) Offered FY 95-99 40
Table 27 - Regeneration Harvest Volume 40
Table 28 - Thinning and Density Management Harvest Volume 40
Table 29 - Regeneration Acres 41
Table 30 - Thinning and Density Management Acres 41
Table 31 - FY 1999 Timber Sales 41
Table 32 - Summary of Silviculture Treatments and Decadal Commitment 42
Table 33 - 1996 to 1999 Summary of Silvicultural Accomplishments 43

Table 34 - RMP - Summary of Special Forest/Natural Product Actions and Accomplishments 44
Table 35 - Cumulative Summary Report of Negotiated Cash Sales - Eugene District - FY 1999 45
Table 36 - Integrated Noxious Weed Management 46
Table 37 - Fire and Fuels Management 46
Table 38 - Fire Management 46
Table 39 - Reciprocal Right-of-Way Agreements 47
Table 40 - Rights-of-Way Agreements and O&C Road Permits 48
Table 41 - Roads (Decommissioned) 49
Table 42 - General Road Maintenance Accomplished 49
Table 43 - Road Status in Key Watersheds 50
Table 44 - Land Tenure, Temporary Use Permits, and Trespass Cases 51
Table 45 - Land Exchange Land Status and LUA Changes 51
Table 46 - No Net Loss Report 52
Table 47 - EA's Per Category For FY 96 - 99 57
Table 48 - Sampled Projects For FY 96 - 99 58
Table 49 - Carryover Projects FY 96 - 99 59
Table 50 - Recreation Area Management Plans 79
Table 51 - Summary of Silvicultural Treatments 80

Executive Summary

This document combines the Eugene District Annual Program Summary and Monitoring Report for fiscal year 1999. This Annual Program Summary addresses the accomplishments of the Eugene District in such areas as watershed analysis, Jobs-in-the-Woods, silviculture, wildlife, forestry, recreation, and land tenure adjustments. It also provides information concerning the Eugene District budget, timber receipt collections, and payments to Lane, Linn, Douglas, and Benton counties. The Monitoring Report compiles the results and findings of implementation monitoring for fiscal year 1999 of the Eugene District Resource Management Plan (RMP) which can be found at www.edo.blm.gov. The Monitoring Report, which is a "stand alone" document, follows the Annual Program Summary in Appendix B and C.

The quantity of timber offered for sale in FY 1999 was 8.0 million board feet (MMBF). This was considerably below the Eugene District Potential Sale Quantity of 36 MMBF. This reduced level of offerings was mainly due to two factors. The *first* factor was Endangered Species Act listing of additional fish species. Sales were not offered until consultation requirements had been completed for both existing species and newly listed fish. These consultation requirements were not completed until midway through the Fiscal Year. *Second*, Judge Dwyer ruled against the USFS and BLM on its application of the requirements to survey for groups of *little known species* labeled "survey and manage species" under a suit brought against the USFS and BLM by a group of environmental organizations. Once this ruling was issued by Judge Dwyer, no further sales could be offered without surveys. Many of these species in question, which are seasonally sensitive, have to be surveyed at specific times of the year. Therefore, it was not possible to complete these surveys by the end of Fiscal Year 1999 (September 30, 1999).

The Eugene District wildlife habitat and endangered species programs in 1999 focused on the conservation and recovery of sensitive species. The District matched more than $112,000 with almost $220,000 in nonfederal funds to support such initiatives. Most notable were projects to promote the conservation of the Fender's blue butterfly, Kincaid's lupine, and Willamette daisy, three species that, this year, were added to the federal list of endangered species. The District has supported research and conservation efforts for these three species for the past four years.

The District continued a variety of endangered species initiatives, including work to promote the recovery of the marbled murrelet: the District continued to be an active participant in developing methods to improve protocol survey and to better define habitats needing survey.

The District helped develop interagency survey methods and management recommendations for Survey & Manage mollusk species and the red tree vole.

The District continued to lead a 5-year Department of the Interior program to improve the conservation and management of a United Nations-designated reserve in northern Honduras under a grant from the U.S. Agency for International Development.

This "Annual Program Summary" gives only a very basic and brief description of the programs, resources, and activities that Eugene District is involved with. This report does give the reader a sense of the enormous scope, complexity, and diversity involved in management of the Eugene District public lands and resources. Although there are and will continue to be challenges that require us to adapt and give our best, the managers and employees of Eugene District take pride in the accomplishments described in this report.

Third Year Evaluation - The third year evaluation of the Eugene District Resource Management Plan has nearly been completed by Oregon State Office staff. The evaluations foreach of the six western Oregon RMPs will be available later this spring. An Executive Summary describing the overall process and conclusions will be mailed to all persons or groups who are on the mailing list for this Annual Program Summary. The individual evaluations will be available, free of charge, upon request and also accessible "on-line" at the Eugene District at **www.edo.or.blm.gov** . The purpose of the evaluation is to determine whether there is significant cause for an amendment or a revision to the plan. This is done by evaluating cumulative monitoring results and accomplishments, determining if the plans goals or objectives are being met, determining whether goals and objectives were realistic and achievable in the first place and whether changed circumstances or new information have altered activities or expected impacts.

Survey and Manage - The Forest Service and Bureau of Land Management currently propose to modify the Survey and Manage and other related species-specific mitigation measures for some rare and/or localized species on National Forests and Bureau of Land Management (BLM) lands within the range of the northern spotted owl. These mitigation measures are contained within the standards and guidelines of the Northwest Forest Plan (NFP) Record of Decision (USDA, USDI 1994), at **www.web.or.blm.gov** . A supplemental environmental impact statement (Environmental Impact Statement For Amendment To The Survey and Manage, Protection Buffer, and Other Mitigating Measures Standards and Guidelines; USDA, USDI 1999) has been prepared that presents three action alternatives to better identify protections needed, clarify language, eliminate inconsistent and redundant direction, and establish a process that will be responsive to new information. The alterna-

tives do not change the underlying purpose of the Northwest Forest Plan and do not address changes to other elements of the plan. Public comments on the Draft were due on March 3, 2000, and a final EIS is expected in May 2000 with a Record of Decision scheduled for June 2000. The ROD for this EIS will likely amend portions of the Eugene District RMP regarding the standards and guidelines for the Survey and Manage Program. The US Fish and Wildlife Service is a partner in this effort. For more information, and to access the draft SEIS, visit **www.or.blm.gov/nwfp.htm** .

Table 1 - RMP Summary of Renewable Resource Management Actions, Directions, and Accomplishments

RMP Resource Allocation or Management Practice or Activity	Fiscal Year 1999 Accomplish-ments	Cumulative Accomplish-ments 1996-1999	Projected Decadal Practices
Regeneration harvest (acres offered)	89	**2740	5,700
Commercial thinning/density management/uneven-age harvest (acres offered)	213	**2747	7,300
Site preparation (acres)	409	***1,097	4,300
Vegetation control, fire (acres)	-0-	-0-	-0-
Prescribed burning (hazard reduction acres)	1	13	500
Prescribed burning (wildlife habitat and forage reduction acres)	-0-	-0-	4,000
Natural or artificial ignition prescribed fire for ecosystem enhancement (acres)	-0-	-0-	5,400
Animal damage control (acres)	122	2,420	6,000
Precommercial thinning (acres)	2,500	15,901	5,900
Brush field/hardwood conversion (acres)	290	290	500
Planting/regular stock (acres)	362	1,912	-0-
Planting/genetically selected (acres)	409	1,208	6,800
Fertilization (acres)	2,418	2,418	16,700
Pruning (acres)	-0-	51	6,300
New permanent road const. (miles/acres*)	2.47/7.5	10.47/47.5	8/42
Roads fully decommissioned/obliterated (miles/acres*)	5.12/15.5	28.02/79.5	-0-
Timber sale quantity offered (mm board feet)	8.0	**133.5	360
Timber sale quantity offered (mm cubic feet)	1.4	**23.0	61
Noxious weed control, chemical (site/acres)	0/0	0/0	-0-
Noxious weed control, other (site/acres)	****/90	112/358	-0-

*Bureau managed lands only.
** Represents cumulative accomplishments from 1995 to 1999.
***This figure represents a correction from the 1998 Annual Program Summary.
****Not able to count sites because contracts were conducted by miles of roadside.

Table 2 - RMP - Summary of Nonbiological Resource or Land Use Management Actions, Directions, and Accomplishments

RMP Resource Allocation or Management Practice	Activity Units	Fiscal Year 1999 Accomplish-ments	Cumulative Accomplish-ments 1996-1999
Realty, land sales	(actions/acres)	0/0	1/0.37
Realty, land exchanges	(actions/acres acquired/ disposed)	0/0/0	4/533/200
Realty, R&PP leases/patents	(actions/acres)	0/0	0/0
Realty, road rights-of-way acquired for public/agency use*	(actions/miles)	1/1	4/1.56
Realty, road rights-of-way, or permits granted**	(actions/miles)	10/19.19	56/95.5
Realty, utility rights-of -way granted (linear/areal)	(actions/acres)	1/0/1	7/5.05/1.03
Realty, withdrawals completed	(actions/acres)	0/0	1/37
Realty, withdrawals revoked	(actions/acres)	0/0	1/120
Mineral/energy, total oil and gas lease	(actions/acres)	0/0	0/0
Mineral/energy, total other leases	(actions/acres)	0/0	0/0
Mining plans approved	(actions/acres)	0/0	0/0
Mining claims patented	(actions/acres)	0/0	0/0
Mineral material sites opened	(actions/acres)	0/0	0/0
Mineral material sites, closed	(actions/acres)	0/0	0/0
Recreation, maintained off highway vehicle trails	(units/miles)	3/8	14/31
Recreation, maintained hiking trails	(units/miles)	11/23	44/92
Recreation, sites	(units/acres)	10/600***	40/2,400
Cultural resource inventories	(sites/acres)	0/1,300	7,300
Cultural/historic sites nominated	(Sites/acres)	-0-	-0-
Hazardous material sites	(identified/ cleaned)	1/1	17/17

***Does not include access acquired through new reciprocal right-of-way agreements, amendments to existing agreements, or exercise of rights under existing agreements.

BUDGET

During fiscal year 1999 the Eugene District expended $15.3 million. This included $1 million in the Jobs-in-the-Woods program, $941,000 for the acquisition of the West Eugene Wetlands, and $600,000 related to fire suppression and fuels management.

There were an average of 217 full time employees during this period.

PILT (Payment in Lieu of Taxes) - The Federal Government provides Payments in Lieu of Taxes (PILT) in recognition of the need to offset losses to local property taxes that are sustained because Federally owned land cannot be taxed. The PILT Act was passed in 1976. The amount of the payments is determined by several codified formulas (U.S.C. 6901-07). Although the PILT payments are administered by BLM, the entitlement lands are often managed by several different Federal agencies.

The PILT payments to local governments are appropriated to BLM by Congress on an annual basis. The BLM's primary responsibility is to calculate the payments according to the formula established by law and to distribute the funds to the affected Counties (see Table 3).

O&C Payments - The Oregon and California (O&C) Revested Lands Act of 1937 (43 U.S.C. 1181f) stipulates that 50 percent of the revenue generated from the 2.5 million acres of revested Oregon and California Railroad lands be shared with eighteen Oregon Counties. Since FY 1991, Congress has replaced the 50 percent formula with an "owl guarantee" formula. This new formula established a floor under the payments to counties to protect affected counties from a precipitous decline in payments from Federal lands affected by management decisions and litigation related to protection of habitat for the northern spotted owl and other forest species.

Congress has since further modified the payment protocol by providing for a "special payment amount" to all of the O&C counties based on an annually decreasing percentage of a five year average (1986-1990), replacing both the old O&C payment and the Coos Bay Wagon Road payment. The "owl guarantee" expires in FY 2004, when payments may revert back to the original formula. Federal law does not stipulate how the O&C payments are to be used by the counties (see Table 4).

RECREATION PIPELINE FUNDS

This fund is intended to reduce infrastructure replacement or facility maintenance needs and resolve critical visitor safety, or recreation management needs, or issues identified in land use plans, including resource protection needs. During the first year of implementation in FY 1998 (funding became available in early May 1998), the Eugene District obligated approxi-

Table 3 - PAYMENTS IN LIEU OF TAXES

OREGON Local Unit of Government	FY 1998 Payment	FY 1999 Payment
BAKER COUNTY	275,261	305,556
BENTON COUNTY	2,377	1,776
CLACKAMAS COUNTY	56,496	47,219
CLATSOP COUNTY	0	0
COLUMBIA COUNTY	0	0
COOS COUNTY	9,102	4,438
CROOK COUNTY	266,899	340,489
CURRY COUNTY	65,157	52,592
DESCHUTES COUNTY	144,496	140,343
DOUGLAS COUNTY	105,090	83,669
GILLIAM COUNTY	19,595	21,405
GRANT COUNTY	176,157	174,267
HARNEY COUNTY	297,381	307,820
HOOD RIVER COUNTY	20,925	19,840
JACKSON COUNTY	51,695	41,347
JEFFERSON COUNTY	30,504	40,617
JOSEPHINE COUNTY	46,089	23,652
KLAMATH COUNTY	218,850	210,174
LAKE COUNTY	297,381	307,820
LANE COUNTY	148,217	126,861
LINCOLN COUNTY	18,468	17,999
LINN COUNTY	48,011	47,169
MALHEUR COUNTY	688,701	710,654
MARION COUNTY	20,628	20,301
MORROW COUNTY	53,086	36,324
MULTNOMAH COUNTY	7,818	7,269
POLK COUNTY	160	0
SHERMAN COUNTY	36,584	38,420
TILLAMOOK COUNTY	10,202	8,313
UMATILLA COUNTY	144,981	98,712
UNION COUNTY	290,185	290,262
WALLOWA COUNTY	171,467	139,329
WASCO COUNTY	22,505	21,954
WASHINGTON COUNTY	716	1,120
WHEELER COUNTY	30,472	30,008
YAMHILL COUNTY	2,588	2,548
STATE TOTAL	**3,778,244**	**3,720,267**

Table 4 - O&C PAYMENTS TO COUNTIES FY 1998 and 1999

OREGON Local Unit of Government	FY 1998 Payment	FY 1999 Payment
BENTON COUNTY	1,896,522	1,818,583
CLACKAMAS COUNTY	3,745,801	3,591,864
COLUMBIA COUNTY	1,390,333	1,333,196
COOS COUNTY	3,982,022	3,818,377
CURRY COUNTY	2,463,454	2,362,217
DOUGLAS COUNTY	16,906,721	16,211,925
JACKSON COUNTY	10,575,981	10,141,352
JOSEPHINE COUNTY	8,153,022	7,817,966
KLAMATH COUNTY	1,579,310	1,514,407
LANE COUNTY	10,306,013	9,882,478
LINCOLN COUNTY	242,971	232,986
LINN COUNTY	1,781,786	1,708,562
MARION COUNTY	985,382	944,887
MULTNOMAH COUNTY	735,662	705,429
POLK COUNTY	1,457,825	1,397,914
TILLAMOOK COUNTY	377,955	362,422
WASHINGTON COUNTY	425,199	407,725
YAMHILL COUNTY	485,942	465,972
TOTAL	**67,491,901**	**64,718,262**

mately $355,000 of the recreation pipeline fund to the design, procurement, and construction of critical infrastructure replacement or repair and visitor safety needs. In FY 1999 $625,000 in projects were undertaken including:

- Construction of fireplaces for two picnic shelters at the Clay Creek Recreation Site.
- Engineering and NEPA compliance for the Whittaker Creek Campground expansion.
- Purchase and installation of a replacement vault toilet at Whittaker Creek Campground.
- Installation of a vault toilet for the Mosby Creek Trail head.
- Installation of a vault toilet for Silver Creek Landing on the McKenzie River.
- Engineering and design for the Lower Lake Creek Recreation Site.
- Construction contract award for the Lower Lake Creek Parking lot and toilet.

Eugene District

- Contract preparation for the Shotgun Recreation Site renovations and system repairs.
- Surveys for the Lower Lake Creek Walkway.
- Design and contract preparation for the Mohawk Portal Signs.

TIMBER SALE PIPELINE FUNDS

The Timber Sale Pipeline Restoration Fund was established under Section 327 of the Omnibus Consolidated Rescissions and Appropriations Act of 1966 (Public Law 104-134). The Act established separate funds for the Forest Service and the Bureau of Land Management, using revenues generated by timber sales released under section 2001(k) of the FY 1995 Supplemental Appropriations for Disaster Assistance and Rescissions Act. Public Law 104-134 directs that 75 percent of the fund be used to prepare sales sufficient to achieve the total Allowable Sale Quantity (ASQ) and that 25 percent of the fund be used to complete a backlog of recreation projects.

The BLM intends to use this fund to regain a year's lead time in the preparation of timber sales over a 5-year time frame.

During Fiscal Year 1999, the Eugene District completed a number of different types of work using this fund such as timber sale layout and marking. Most of the fund was spent on initial steps such as reconnaissance, identifying streams and Riparian Reserves, botanical and cultural clearances, and Interdisciplinary Team project design and analysis of FY 2001 and FY 2002 planned timber sales.

RECREATION FEE DEMONSTRATION PROGRAM

In early March 1998, the Eugene District received approval for establishing its Recreation Area Pilot Fee Demonstration Projects under the authority of Public Law 104-134, Section 315. This authority allows the retention and expenditure of recreation fees for operations (including the cost of collecting fees) and maintenance of the recreation sites and areas where the fees were collected. A special account was established for each area.

Prior to 1998 all recreation fees were combined with other revenue sources from public O & C lands and allocated between the USDI and the O&C counties. Recreation facilities were wholly dependent on the funding provided through the Congressional appropriations process foroperations and maintenance funding.

The Association of O&C Counties supported allowing the retention of all recreation fee revenues under the Fee Demonstration Pilot authority to help operate the Bureau's recreation facilities.

Implementation Status - The Recreation Fee Demonstration Program was initiated in 1997 and is being fully implemented. It includes all Eugene District recreation program fee sites and Special Recreation Permits. Fee sites include the Whittaker Creek Campground, Clay Creek Campground and group picnic shelters, Sharps Creek Campground, and Shotgun Creek Park. Fees generated from these sites are applied to the Fee-Demo program as shown in Table 5 below**:**

Table 5 - Recreation Fee Demonstration Program Statistics

SITE NAME	FY 1998 REVENUES $	FY 1999 REVENUES $	UTILIZATION $
Shotgun Park	10,230	17,430	6675
Siuslaw River SRMA	9,998	19,736	11,408
Eugene General	6,999	1,280	0
Mohawk Area	639	750	0
Sharps Creek Campground	2,451	2,782	625

During FY 1999 most of the fee demonstration revenues were used to fund operations, including temporary visitor services staffing and volunteer support, at the facilities where the fees were collected.

Golden Passports - The revenues accumulated through the sale of Golden Age and Golden Access Passports amounted to $1,280 for FY 1999.

CHALLENGE COST SHARE (CCS)

The Eugene District leverages its funds with nonfederal partners through its Challenge Cost Share (CCS) program. CCS projects are partnerships with nonfederal organizations such as State and local governments, Native American tribes, non-profit organizations, landowners, individuals, and corporations or private institutions, working together to accomplish common objectives. To qualify as a CCS project, BLM must match appropriated funds with contributions of goods, services, or funds from the nonfederal partner. Service oriented initiatives that are educational or customer service oriented also are acceptable uses of CCS funds as long as they meet Bureau objectives to benefit public land uses.

Congressional support for this strategy continues to be strong and the Eugene District is participating in more CCS projects than in the past. The **Table 6** lists the projects funded during FY 1999.

Table 6 - Challenge Cost Share Projects - FY 1999

CHALLENGE COST SHARE PROJECT	BLM Contribution	Nonfederal Contribution
Population monitoring for Willamette Daisy	$7,000	$6,000
Increasing the abundance of rare wetland prairie plant species	7,000	3,350
McKenzie water quality monitoring	2,200	10,500
Controlling woody vegetation in wetland prairies	4,000	2,295
Restoring habitat for Fender's blue butterfly	5,500	6,000
Propagation and restoration methods for sensitive plant species	9,000	8,000
Use of regenerating forest stands, natural forest openings, and valley floors in western Oregon by the willow flycatcher and yellow-breasted chat	6,600	24,000
Restoration of wetland habitat in selected Willamette Valley wetlands: management considerations for shorebird use	5,000	52,000
Characteristics and spatial relationships of day roosts for bat communities in the western Oregon Cascades.	18,000	38,000
McKenzie watershed education project	3,000	15,000
Genetic study of wayside aster	7,000	10,898
Population monitoring of Kincaid's lupine	8,000	7,000
Population monitoring of tall bugbane	6,000	5,000
Population monitoring and population viability analysis for shaggy horkelia	8,000	7,000
Monitoring of rare plant populations and restored wetland habitats in the West Eugene Wetlands	16,000	24,000
TOTALS	**$112,300**	**$219,043**

EMPLOYMENT TRENDS

Since implementation of the Eugene District RMP in 1995, Lane County, Oregon, and the United States have benefitted from a robust economy. Growth in wage and salary employment has been impressive. Statewide employment increased 10.6 percent between 1994 and 1998, and for Lane County employment increased by 13,800 jobs, or 11 percent. Since the 1984-88 baseline period used by the RMP, total wage and salary employment has increased by 38 percent in Lane County. This compares to a 45.6 percent increase statewide.

Since the baseline period Lumber and Wood Products employment in Lane County has dropped from 11,020 to 7,100 in 1998, a decrease of 35.6 percent. During the baseline period, Lumber and Wood Products employment represented 10.9 percent of total employment. Lumber and Wood Products currently represents 5 percent of total employment. Job losses and employment growth in other sectors have combined to reduce the importance of the Lumber and Wood Product industry in the local economy. Employment sectors that have grown significantly since the Baseline period include Construction and Mining (127.3%), Other Manufacturing (82.4%), Services (73.1%), and Finance/Insurance/Real Estate (54.0%).

Statewide, Lumber and Wood Products employment has decreased by 16,560 to 58,500 in 1998, or about 22 percent since the 1984-88 baseline period. The decline in Lumber and Wood Products employment is less than would be anticipated given the 50 percent decline in harvests. Factors such as decreased exports and increases in manufactured home employment have had an offsetting effect (see Table 7 and Table 8 for detailed information on employment by industry for Oregon, and Lane County).

Table 7 - Resident Labor Force, Employment by Industry, Oregon

	1970	1980	Average 1984-88 Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998
Civilian Labor Force	864,500	1,295,000	1,362,400	1,491,000	1,508,000	154,200	1,596,000	1,640,000	1,652,700	1,719,700	1,727,600	1,762,200
Unemployment	61,700	107,000	104,800	82,000	90,000	116,000	116,000	89,000	80,100	101,600	100,600	98,500
Total Wage and salary Emp.	709,200	1,044,600	1,068,680	1,251,900	1250,800	1,274,200	130,840	1,362,900	1,418,400	1,474,600	1,526,400	1,556,600
Total Manufacturing	172,300	215,100	203,240	220,300	211,700	209,000	211,700	221,300	229,300	235,800	243,600	244,700
Lumber & Wood Products (& paper)	76,200	79,900	75,060	73,200	65,800	63,800	62,700	63,300	61,300	59,800	60,200	58,500
Other Manufacturing	96,100	135,200	128,180	147,100	145,900	145,200	149,000	158,000	168,000	176,000	183,400	186,200
Total Nonmanufacturing	536,900	829,500	865,440	1,031,600	1,039,000	1,065,200	1,096,700	1,141,600	1,189,100	1,238,900	1,282,800	1,311,900
Const. & Mining	30,800	48,800	35,800	54,000	53,000	52,000	55,700	62,900	70,400	79,400	83,300	84,300
Trans., Comm. & Utilities	48,700	60,500	58,040	64,500	65,200	65,700	66,800	68,900	71,300	73,500	74,900	76,400
Trade	162,000	255,600	269,680	313,100	314,300	318,700	328,900	344,100	357,000	365,900	377,500	383,900
Finance, Ins. & Real Est.	36,000	70,000	69,360	80,300	83,200	86,000	84,600	87,800	87,200	91,000	94,800	95,200
Services & Misc.	112,700	191,400	231,180	296,200	296,900	311,800	328,300	343,200	362,900	382,600	402,800	416,800
Government	146,700	203,200	201,360	223,500	226,400	231,000	232,600	234,700	240,200	246,600	249,500	255,400

Table 8 - Resident Labor Forces, Employment by Industry, Lane County

	1970	1980	Average 1984-88 Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998
Civilian Labor Force	87,250	135,400	134,420	148,200	147,500	145,600	150,600	155,200	155,900	159,900	157,500	162,300
Unemployment	6,850	13,300	10,220	8,700	9,600	10,700	11,500	8,400	8,200	9,200	9,000	8,800
Total Wages and Salary Emp.	69,650	102,900	101,240	117,900	115,700	117,200	119,500	126,300	129,500	133,100	136,800	140,100
Total Manufacturing	18,400	19,800	19,300	20,700	19,000	18,200	18,500	19,200	19,600	19,900	21,400	22,200
Lumber & Wood Products	15,400	12,900	11,020	10,200	8,700	8,300	7,900	7,900	7,600	7,400	7,300	7,100
Other Manufacturing	3,000	6,900	8,280	10,500	10,300	9,900	10,600	11,300	12,000	12,500	14,100	15,100
Total Nonmanufacturing	51,250	83,100	81,960	97,200	96,700	99,000	101,000	107,000	109,900	113,300	115,400	117,800
Const. & Mining	2,950	4,600	3,300	4,200	4,200	4,500	4,900	5,700	6,100	6,800	7,500	7,500
Trans., Comm. & Utilities	4,150	5,100	4,180	4,500	4,400	4,500	4,700	4,700	4,700	4,500	4,600	4,500
Trade	14,650	25,700	25,820	30,600	30,000	30,000	30,700	32,100	33,500	34,000	34,400	34,900
Finance, Inc. & Real Est.	2,950	5,500	4,740	5,800	6,100	6,200	6,300	6,800	6,800	7,100	7,200	7,300
Services & Misc.	10,050	19,700	22,180	28,000	27,800	29,200	31,100	33,700	34,600	36,100	36,900	38,400
Government	16,500	22,500	21,800	24,200	24,200	24,600	24,000	24,000	24,300	25,000	24,800	25,300

ALL LAND USE ALLOCATIONS (LUAs)

There were only minor changes in major LUA acreages in FY1999 due to land tenure adjustments (land exchanges, land sales, purchases, donations and boundary adjustments).

Late-Successional Reserves - There were no changes due to land tenure adjustment actions.

General Forest Management Area - There were no changes due to land tenure adjustment actions.

Connectivity - There were no changes due to land tenure adjustment actions**.**

Adaptive Management Area - There were no changes due to land tenure adjustment actions.

District Designated Reserves - There was an increase of 1.66 acres through donation of additional acreage to the United States for the Row River Trail.

Riparian Reserves - There were no changes due to land tenure adjustment actions.

Other - A 5.46 acre parcel of land (survey hiatus), previously unknown to BLM was discovered in the course of a private land survey and later confirmed by BLM. The tract is occupied by a County road, private road, electric transmission line corridor, and residential buildings and yards. A LUA has not yet been assigned to the tract.

In FY 1998 a theme was created in the Bureau's Geographic Information System (GIS) to track the major land use allocations. The GIS system has been used to complete the table below showing Land Use Allocation acreages as of October 1998. It has not been updated, except to reflect the increase in District Designated Reserve acreage discussed above.

ROW River Bike Bridge

Table 9 - Realty Actions Affecting LUA Acreages

Land Use Allocation	Total BLM Acres			
	O&C	PD	Other	Total
Late-Successional Reserves - LSR	125,246	5,370	0	130,616
General Forest Mgmt. Area - GFMA	99,722	1,855	0	101,577
Connectivity	60,639	223	375	61,237
Adaptive Mgmt. Areas - AMA	15,280	1,395	0	16,675
District Designated Reserves - DDR	2,809	366	0	3,175
Total	303,696	9,207	375	313,278

Acreage calculated using Land Use Allocation (LUA) and Land Lines (LLI) themes in GIS. Acreage changes slightly over time as new property corner coordinate information is entered in LLI theme to better define the actual location of public land property boundaries. Such changes will occur even when there are no changes in actual property ownership. The numbers at the left were derived from the initial comparison of the LLI and LUA themes. Some inconsistencies between the 2 themes were identified and are in the process of being resolved, with future comparisons expected to produce more accurate numbers with slightly higher total acreages.

Table 10 - Major Land Allocation Acres

Land Use Allocation	Total BLM Acres			
	O&C	PD	Other	Total
Late-Successional Reserves - LSR				138,700
General Forest Mgmt. Area - GFMA				100,000
Connectivity				57,800
Adaptive Mgmt. Areas - AMA				16,100
District Designated Reserves - DDR				2,900
Total				315,500

AQUATIC CONSERVATION STRATEGY IMPLEMENTATION (ACS)

The Aquatic Conservation Strategy (ACS) was developed to restore and maintain the ecological health of watersheds and aquatic ecosystems contained within them on public lands. The strategy is to protect salmon and steeled habitat on federal lands managed by the BLM. This conservation strategy employs several tactics to approach the goal of maintaining the "natural" disturbance regime. The ACS strives to maintain and restore ecosystem health at watershed and landscape scales to protect habitat for fish and other riparian dependent species and resources and restore currently degraded habitats.

Riparian Reserves - Silvicultural Practices have been implemented within Riparian Reserves to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy (ACS) objectives. These silvicultural practices include tree planting, precommercial thinning, and density management thinning.

Tree planting is addressed in the section on "Timber Resources - Silvicultural Activities."

Approximately 907 acres within Riparian Reserves have been precommercially thinned to control stocking and manage stands (see Table 11). Precommercial thinning is also addressed in the section on "Timber Resources - Silvicultural Activities."

Approximately 87 acres within Riparian Reserves have been density management thinned to accelerate the growth of trees, provide large snags and down logs, and manage species composition. Density management thinning of Riparian Reserves has been implemented as part of multi-resource projects, including timber sales, in other land use allocations. In addition trees within Riparian Reserves have been killed to create snags and coarse woody debris. Areas of snag and coarse woody debris creation in Table 11 include only areas where snags and/or coarse woody debris have been created from timber harvest and stream restoration projects.

Watershed analysis - Watershed analysis is required by the Northwest Forest Plan (NFP) Record of Decision (ROD). Watershed analyses includes:

* Analysis of at-risk fish species and stocks, their presence, habitat conditions and restoration needs;

- Descriptions of the landscape over time, including the impacts of humans, their role in shaping the landscape, and the effects of fire;

- The distribution and abundance of species and populations throughout the watershed; and

- Characterization of the geologic and hydrologic conditions.

This information is obtained from a variety of sources, including field inventory and observation, history books, agency records and old maps and survey records. Watershed analysis proceeded at a consistent pace. Coordination occurred between the BLM Eugene District and adjacent BLM Districts, and USFS to assure that watershed analysis in areas of joint ownership had appropriate participation from adjacent districts or agencies. The current status of the Eugene District watershed analysis is shown in Table 12.

The following table is a summary of non-flood watershed restoration projects including Riparian Reserve density management and road decommissioning.

LATE-SUCCESSIONAL RESERVES

Late-Successional Reserve assessments have been completed for all mapped Late-Successional Reserves in the Eugene District. The Oregon Coast Province (Southern Portion) Late-Successional Reserve Assessment addresses the portions of LSR RO267 and RO268 in the Coast Range and South Valley Resource Areas of the Eugene District. The South Cascades

Table 11 - Riparian Reserve Stand Treatments (# acres treated)

	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
Precommercial Thinning (acres)	0	1600	1450	600	907
Commercial Thinning (acres)	20	19	11	317	87
Coarse Woody Debris Creation (acres)	0	0	0	14	1.5
Snag Creation - Acres (# of snags created)	15 (11)	935 (640)	984 (1494)	1363 (2230)	770 (1100)

Eugene District

Late-Successional Reserve Assessment addresses the portions of LSR 222 in the South Valley Resource Area of the Eugene District. The Regional Ecosystem Office has reviewed these assessments and found that they provide a sufficient framework and context for projects and activities within the Late-Successional Reserves. For each assessment, the Regional Ecosystem Office (REO) acknowledged that many types of future projects that are consistent with the assessment and the Standards and Guidelines in the Northwest Forest Plan are exempted from subsequent project-level review by the Regional Ecosystem Office.

In FY 1999 there was no commercial thinning of stands within Late-Successional Reserves. Approximately 667 acres of young stands within Late-Successional Reserves were precommercially thinned to control stocking and manage stands (see Table 14). Precommercial thinning in Late-Successional Reserves is addressed more fully in the section on "Timber Resources — Silvicultural Activities." Approximately 344 acres within Late-Successional Reserves were treated to release individual trees from competition to increase individual tree growth rate and crown size and enhance stand structural heterogeneity. Additionally, individual trees within Late-Successional Reserves were treated to create snags and wildlife habitat structures, such as cavities, loose bark sheets, and broken tops (see Table 14).

Approximately 0.67 mile of roads within Late-Successional Reserves was decommissioned as part of a road decommissioning and realignment project to repair storm-damaged roads. Road No. 22-1-31.1 was decommissioned by removing culverts, blocking road access, and hydro mulching (EA 99-21).

A Temporary Use Permit was issued to Weyerhaeuser Company to use an existing gravel stockpile in the Late-Successional Reserve. This use did not involve any new surface disturbance (CE 99-4).

Table 12 - Completed Watershed Analysis Areas

	Watershed Analysis Areas	Number of Key Watersheds	BLM Acres	Percent Total Acres
Completed through FY99	20	4	252,395	81%
Remaining FY00+	7	1	58,560	19%
Total	27	5	310,955	100%

Table 13 - Summary of Non-flood Watershed Restoration Projects FY 99

PROJECT	DESCRIPTION
Deer Creek Restoration	Restoration of aquatic habitat in a 0.5 mile reach
Big River/Edwards Creek	Placement of instream structures for fish habitat improvement
Native Seed Collection	Collection of native seeds
Native Seed Grow Out	Native seed propagation
Suislaw River Habitat Enhancement	Placement of instream structures for fish habitat improvement
Fawn, Pugh, and North Culvert replacements	Replacement of culverts that were passage barriers
Whittaker Cr. Riparian Restoration	Riparian restoration

ADAPTIVE MANAGEMENT AREAS

Central Cascades Adaptive Management Area (CCAMA) - The McKenzie Resource Area took several steps toward completing a landscape design for the Middle McKenzie Landscape Area (MMLA) using many of the concepts developed for the Blue River Landscape Design on the Willamette National Forest. The MMLA is within the Central Cascades Adaptive Management Area and is located 2 miles east of Leaburg, Oregon.

The Landscape design incorporates information from a fire history study completed on the Bear Creek and Marten Creek watersheds. This fire history information is being used to determine the frequency of timber harvests, rotation lengths, and retention trees. The design will alsorecommend temporal and spatial design of the timber harvest, suggest watershed restoration activities, monitoring and research projects.

Other AMA activities that the Eugene District participated in were:

- A regional workshop “Beyond the Buzzwords”: An early progress report on adaptive management.
- The Willamette Province Workforce Partnership, a partnership dedicated to maintaining a highly skilled workforce in out local communities by offering multi-project, multi agency contracts.
- A moss harvest study that estimated the size of the moss resource available for harvesting.
- A restoration project on Deer Creek that involved public and private lands. Trees were pulled over in the riparian area to add structure to the stream channel.

Interagency cooperation and project planning continues within the CCAMA framework.

MATRIX - 15% ANALYSIS

The NFP/ROD (pg. C-44) and RMP/ROD (pg. 48) require that BLM and USFS provide for the retention of Late-Successional/old growth fragments in the Matrix land use allocation where little remains. The Standards and Guidelines are to be applied to any 5th field watershed in which Federal forest lands are currently comprised of 15 percent or less late-successional forest land Use Allocation, considering all land allocations. All Eugene District FY95-99 sales sold under the NFP have complied with the 15 percent rule per the initial analysis. In 1996 the Eugene District completed an initial screening of watersheds with the Siuslaw, Umpqua, and Willamette National Forests. General results were reported in the FY97 Eugene Annual Program Summary. The initial analysis applies to all actions with decisions prior to October 1, 1999.

Table 14 - Late-Successional Reserve Stand Treatments - (Number of acres treated)

	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
Precommercial thinning - Acres	0	1476	1242	3927	667
Density Management Thinning - Acres	31	59	0	223	0
Single tree release - Acres (Number of trees released)	0	0	0	0	344 (1376)
Snag Creation - Acres (Number of snags created)	0	0	0	14	1253 (998)
Wildlife Habitat Structure Creation - Acres (Number of trees treated)	120 (89)	1000 (200)	0	1050 (315)	500 (870)

A joint BLM/FS Instruction Memorandum was issued on September 14, 1998. This provided the final guidance for implementing the 15 percent S&G throughout the area covered by the Northwest Forest Plan. Implementation of this guidance is required for all actions with decisions beginning October 1, 1999. A 15 percent analysis, based on the September 1998 guidance, is currently in progress, but overall results will not be available for publication in the FY99 Annual Program Summary. They will be published concurrent with completion of the Eugene 3rd year RMP evaluation in *Spring 2000.*

AIR QUALITY

All prescribed fire activities were carried out on Matrix LUA in compliance with the Oregon State Smoke Management Plan, State Implementation Plan, and consistent with the Clean Air Act. No Coarse Woody Debris was consumed while carrying out these treatments. No smoke intrusions occurred into designated areas as a result of prescribed burning activities on the District.

Prescribed fire projects in 1999 were limited to broadcast burning on one area consisting of 25 acres, pile burning on 11 areas consisting of 300 acres of machine piles, and 10 areas consisting of 84 acres of hand piles burned.

WATER AND SOIL

Number of Temperature Monitoring Stations:

1996	9 sites
1997	29 sites
1998	50 sites
1999	49 sites

The Eugene District successfully collected and analyzed steam temperature at 49 sites as part of the regular monitoring program. Instruments at 2 additional sites were lost or vandalized. The District assisted the Lost Creek Watershed Council by performing statistical and graphical data analysis on 7 sites operated by the council. In addition, three thermistors were deployed at the Burntwood site to assess the thermal stratification in response to a fish habitat improvement project.

Number of Gauging Stations Operated:

1996	4 stations
1997	1 station
1998	1 station
1999	1 station·

- A cooperative agreement with the McKenzie Watershed Council, and funding the operation of a gauging station through the USGS.

In addition, the Eugene District is utilizing an Lane County instream flow measurement site to collect discharge data in cooperation with the Lost Creek Watershed Council.

Table 15 - Central Cascades AMA Land Use Allocation Under the Northwest Forest Plan

Land Use Allocations	Acres	Management Goal
Adaptive Management Area	165,541 [148,946 Willamette National Forest, 16,595 Eugene District BLM]	Develop and test technical and social approaches to achieve desired ecological, economic, and social objectives

Number of Sediment Sampling Stations Operated:

1996	4 stations
1997	1 station
1998	0 stations, *14 sites
1999	0 stations, *14 sites

- **Grab samples for McKenzie Watershed Council cooperative storm water monitoring effort.**

State Listed Clean Water Act 303d Streams

Stream temperature data was provided to the Oregon Department of Environmental Quality (DEQ) for use in developing the 1998 list of water quality limited streams. Approximately 41 stream segments included on the DEQ 1998 Section 303d List of Water Quality Limited Waterbodies across BLM administered land in the Eugene District. These 41 State listed 303d segments, identified by the Department of Environmental Quality (DEQ), require the development of Water Quality Management Plans (WQRP) and Total Maximum Daily Load (TMDL) allocations.

The 303(d) listed streams have been included in the site prioritization for the temperature monitoring. The Eugene District BLM has begun to implement the *Forest Service and Bureau of Land Management Protocol for Addressing Clean Water Act Section 303(d) Listed Waters* and has begun cooperation with DEQ on TMDL efforts within the Willamette Basin. Per the request of DEQ, the District submitted data for inclusion in the 2000 303(d) list.

Municipal watersheds - The following community watersheds are located within the Eugene District:

Updated Stream Information - The District has accumulated updated stream information in the form of stream location surveys conducted in the presale phase. In FY99, stream (hyd) update was completed for one watershed and the First Approximation (the topographically based component of the update) was completed for 7 watersheds. The number of stream miles "found" in this process has not been calculated to date.

The District also has gauging station data and sediment data from the late 1980s and early 1990s. An effort is underway to compile and analyze this information.

Use of Best Management Practices (BMP) - The District has implemented ground-based yarding and the associated Best Management Practices (designated skid trails on 10% or less of this ground, 25% soil moisture, and subsoiling of the skid trails) on approximately 187 acres. Approximately 2 miles of native surface roads and skid trails were subsoiled post-harvest. These actions resulted in compliance with the RMP standard of not exceeding 1 percent productivity/growth loss for the treated acres.

Implementation monitoring occurred at 6 sites on 4 timber sales to ensure that soil/water goals identified in contracts are being understood and implemented correctly.

The District constructed about 350 drainage features (check dams and water bars) on a multi-use trail system in the Shotgun Creek area designed to reduce sediment input to streams. Drainage features were installed on slopes ranging from 3 to 55 percent and at varying angles from 90 to 10 degrees from parallel. The effectiveness of each type of feature at different skews and gradients will be monitored and evaluated for use on existing and future trail systems.

Sediment Monitoring - Road sediment rates were monitored and analyzed on approximately 5 research plots during FY99 in the Coast Range of the Eugene District through a cooperative research project with the USFS Rocky Mountain Research Station. A companion study to this evaluated travel distances through hill slope vegetation below relief culverts. Sediment rates from these roads were less than one half of the rates predicted by the Washington State Board of Forestry methodology (TFW) approved for federal watershed analysis. Upon completion in FY00, the TFW model will be recalibrated to more accurately reflect these actual rates.

Road Related Analysis and Studies - During FY 99 roads were analyzed during watershed analysis for their ability to generate sediment and their connectivity to the stream channel system. Sediment production rates were compared to a calculated natural background rate. The Washington State Forest Practices Board methodology was utilized as suggested in the guidelines for federal watershed analysis.

Table 16 - Summary of Eugene District Streams on the Final 1998 DEQ 303(d) List

303(d) Stream Segment	Extent	Factor/Season
Deadwood Creek	Mouth to headwaters	Habitat Modification
Deadwood Creek	Mouth to headwaters	Temperature-Summer
Eames Creek	Mouth to headwaters	Biological
Lake Creek	Mouth to Congdon Creek	Temperature
Siuslaw River	Mouth to Headwaters	Temperature
Long Tom	Mouth to Headwaters	Bacteria-Water Contact Recreation
Long Tom	Mouth to Headwaters	Temperature - Summer
Long Tom River	Mouth to Fern Ridge Reservoir	Bacteria-Water Contact Recreation
Long Tom River	Mouth to Fern Ridge Reservoir	Temperature-Summer
Fern Ridge Reservoir	Reservoir	Bacteria-Water Contact Recreation
Fern Ridge Reservoir	Reservoir	Turbidity
Calapooia River	Mouth to Brush Creek	Temperature-Summer
Calapooia River	Mouth to Brush Creek	Bacteria-Water Contact Recreation
Calapooia River	Mouth to Brush Creek	Bacteria-Water Contact Recreation
Calapooia River	Mouth to Brush Creek	Dissolved Oxygen (DO)
Fall Creek	Mouth to Fall Creek Reservoir	Temperature-Summer
Fall Creek	Fall Creek Reservoir to headwaters	Temperature-Summer
Horse Creek	Mouth to Eugene Creek	Temperature-Bull Trout-Summer
McKenzie River	Mouth to Ritchie Creek	Temperature-Summer
McKenzie River	Ritchie Creek to SF McKenzie River	Temperature - Bull Trout - Summer
McKenzie River	Mouth to Leaburg Dam	Temperature-Summer
McKenzie River	Leaburg Dam to S. Fork McKenzie	Temperature-Summer-Fall
MF Willamette River	Mouth to Dexter Lake	Temperature-Summer
Mill Creek	Mouth to Headwaters	Temperature-Summer
Willamette River	Santiam River to Calapooia	Temperature-Summer
Willamette River	Calapooia River to Long Tom	Bacteria-Water Contact Recreation
Willamette River	Calapooia River to Long Tom	Temperature-Summer
Willamette River	Long Tom River to McKenzie	Temperature-Summer
Willamette River	Santiam River to Calapooia	Bacteria-Water Contact Recreation
Winberry Creek	Mouth to North/South	Temperature-Summer
Siuslaw River	Mouth to headwaters	Temperature-Summer

303(d) Stream Segment	Extent	Factor/Season
Coast Fork of Willamette	Mouth to Cottage Grove Reservoir	Bacteria-Water Contact Recreation
Coast Fork of Willamette	Mouth to Cottage Grove Res.	Bacteria--Water Contact Recreation
Cottage Grove Reservoir	Reservoir	Toxics--Tissue and Water--mercury
Row River	Mouth to Dorena Reservoir	Temperature - Summer
Laying Creek	Mouth to Saltpeter Creek	Temperature--Summer
Coyote Creek	Mouth Headwaters	Dissolved Oxygen--Cool Water Aquatic L.
Coyote Creek	Mouth to Headwaters	Bacteria--Water Contact Recreation
Siuslaw River, South Fork	Mouth to Kelly Creek	Biological
Mohawk River	Mouth to Headwaters	Temperature--Summer

The road inventories and subsequent sediment analysis included all public and private roads within the watershed either through a sampling process or through 100 percent inventory. Roughly one half of the acreage and road mileage analyzed was BLM public land, but included private land to gain a watershed wide understanding of impacts relative to natural background levels of sediment for the whole watershed. Increases were detected over the natural background levels ranging from 5 to 20 percent using the Washington State methodology and, adjusted with the above sediment monitoring date, are ranging 2 to 10 percent. These rates are very minor relative to natural fluctuations.

The Eugene District RMP directs that transportation management plans be developed that meet ACS objectives. Plans were completed as part of watershed analysis for 250 miles of road in, Calapooia, and Fall Creek watersheds. Transportation planning entailed a field review of all BLM controlled roads to locate current high fine sediment delivery situations, and to identify which of these could be effectively managed to reduce sediment delivery from the road network.

Table 17 - Community Watersheds in the Eugene District

Watershed Name	System Name	Population Served	Filtered (Y/N)	Acres (BLM)	Acres (Other)	Acres (Total)
McKenzie River	EWEB	84,750	Y	25,910	820,863	846,773
Layng Creek	City of Cottage Grove	8000	Y	107	37,059	37,166
Row River	City of Cottage Grove	8000	Y	37,209	160,503	19,7712
Prather Creek	City of Cottage Grove	8000	Y	0	3,737	3,737
Beaver Creek	London Water Co-op	50	Y	211	524	735
Long Tom River	City of Monroe	485	Y	19,117	232,223	251,340

WILDLIFE HABITAT

Eugene District biologists presented information on several topics to local elementary school students and home-school students. A biologist presented results of an oak woodland assessment to The Wildlife Society.

Special Habitats - The Eugene District evaluated wetland and riparian habitat conditions as part of the analyses of the Calapooia, Long Tom, and Wildcat watersheds. The District spent $8,900 to haul logs that had fallen into roads, etc. for wildlife/fisheries projects, primarily stream restoration. The District participated in the formation of an interagency oak working group to address the decline of oak woodlands in Oregon, Washington, and California.

Nest Sites, Activity Centers, and Rookeries - The Eugene District created 290 snags on 325 acres of regeneration harvest units. The District created approximately 2,000 snags on 1,400 acres within the Matrix land use allocation in Mohawk/ McGowan and Lost Creek watersheds. The Eugene District, in cooperation with volunteers, monitored 20 osprey nest sites and continued to update and improve nesting data for osprey with the Oregon Department of Fish and Wildlife.

Elk Habitat - The Eugene District developed plans within timber sale Environmental Assessments to decommission nonessential roads. A Transportation Management Plan was completed for the Calapooia Watershed that identified roads to be decommissioned. Road densities and habitat use by big game animals were addressed in the Calapooia Watershed Analysis. The District continued to reduce road densities where possible through decommissioning and seasonal closures. The District began producing a Transportation Management Plan for the Long Tom Watershed to protect natural resources including elk and other species sensitive to disturbance from road use.

Late-Successional Reserve Habitat Improvement - The Eugene District treated young stands (30 years and younger) to change their development trajectory from tree plantations to future late-successional forest. The District completed density reduction (similar to precommercial thinning) on 150 acres, individual tree release treatments (1,103 plots) on 293 acres, and small gap creation (597 plots) on 201 acres.

FISH HABITAT

The Eugene District continues to implement the Aquatic Conservation Strategy as outlined in the Northwest Forest Plan and Eugene District Record of Decision.

Habitat Management Plans - The District continues to implement restoration efforts of the Upper Siuslaw, Whittaker Creek, and Lake Creek Aquatic Habitat Management Plan.

Cooperative Efforts - Aquatic habitat programs are closely coordinated with management efforts of other Federal, State, and County agencies, and the activities of basin and regional organizations such as watershed councils and the Willamette River Initiative. The District works with other interest groups, and is an active participant in educational programs such as Salmon Watch.

Habitat restoration projects were conducted in cooperation with the Oregon Department of Wildlife, and private timber companies and landowners under the Wyden Amendment authority.

Information Gathering - The Oregon Department of Fish and Wildlife inventoried 33 miles of aquatic habitat in the District under a contract with BLM. BLM inventoried an additional 2 miles of aquatic habitat. The District operated a smolt trap on Wolf Creek for three months with assistance from ODFW and other volunteers. Spawning ground counts were completed on 10 miles of stream. Monitoring and evaluation of restoration projects continued, primarily using photo point images.

Restoration Activities - One mile of habitat was restored in Deer Creek by pulling large trees from upslope into the stream channel. One and a half miles of Big River and Edwards Creek were restored by placement of log and boulder structures and replacement of a barrier culvert; work was done cooperatively with Weyerhaeuser Corporation. Stream restoration by placing logs along a total of a mile of Perkins and Harms creeks as part of timber sale harvest. A Wyden Amendment project restored habitat on two miles of Whittaker Creek and one and half miles of the Siuslaw River using boulders and logs to create instream structure. The District contracted with the Federal Highway Administration to replace three large culverts along the Siuslaw River. Riparian access routes for instream structure were prepared and planted in conifers. Five acres of riparian vegetation was converted from brush and red alder to conifer.

SPECIAL STATUS AQUATIC SPECIES

Oregon Chub - The District participated in development and implementation of the Oregon chub recovery plan.

Bull Trout - The District participated in Level 1 consultation for the bull trout. A recovery plan is in preparation. Since no spawning or rearing habitat is known to occur on District managed lands, primary management actions have been to maintain or enhance water quality in waters used by bull trout.

Willamette Spring Chinook - The District continues to participate in recovery efforts started by the Spring Chinook Interest Group well before the species was listed. Three miles of habitat inventory in McGowan Creek included spring chinook habitat. Restoration work for one mile in Deer Creek was part of the habitat restoration plan for spring chinook. The District participated in Level 1 consultation activities for the spring chinook.

Willamette Steel Head - The District only manages four miles of habitat used by the listed Willamette steel head. No activities were conducted in this habitat during the year.

Coastal Coho Salmon - Thirteen miles of habitat were inventoried and ten miles of spawninghabitat monitored for coho salmon. In addition, evaluation of coho salmon production from habitat restoration projects in Wolf Creek was conducted using a smolt trap. Habitat restoration work on 3.75 miles of habitat was designed to improve habitat for coho salmon as well as other native species. The District continues to monitor coho habitat and evaluate habitat restoration projects using photo points.

Umpqua Cutthroat Trout - Although the Umpqua cutthroat trout is proposed for delisting, it is currently still listed as an endangered species. The District has only about nine miles of Umpqua cutthroat trout habitat. The District continued to monitor three miles of habitat that was restored in previous years.

SPECIAL STATUS AND SEIS SPECIAL ATTENTION SPECIES (ANIMALS)

Endangered, Threatened, and Proposed Species

Fender's Blue Butterfly - In cooperation with the Nature Conservancy and the National Center for Ecological Analysis and Synthesis, the Eugene District continued to evaluate and improve techniques for protection and reestablishment of native plant communities relied upon by the Fender's blue butterfly.

Canada Lynx - This species is not known to occur in the Eugene District.

Columbia White-Tailed Deer - This species does not occur in the Eugene District.

American Peregrine Falcon - The peregrine falcon was de-listed in 1999. Prior to de-listing the Eugene District surveyed 600 acres of potential peregrine falcon nesting habitat. No peregrines were detected.

Northern Spotted Owl - The Eugene District assisted the NCASI Adaptive Management of the Northern Spotted Owls study that monitored 30,000 acres of habitat. District staff monitored 8,000 acres of owl habitat in cooperation with private timber companies and consultants. The District surveyed fifteen 1997-2000 timber sales (1,650 acres) for spotted owl occupancy, visited 20 known owl sites (16,000 acres), and cooperated with private companies and consultants who visited 17 additional owl sites. The District coordinated work with the Pacific Northwest Research Station, which surveyed 44 known owl sites in the Coast Range. The Eugene District will finish the Long Tom Watershed Analysis and the Wildcat Watershed Analysis in fiscal year 2000. These analyses will incorporate, among other issues, the state of spotted owl and murrelet habitat, and recommendations for future management.

Marbled Murrelet - The District continued a variety of endangered species initiatives, including work to promote the recovery of the marbled murrelet: the District continued to be an active participant in developing methods to improve protocol survey and to better define habitats needing survey.

Protocol surveys were completed for murrelet in 13 areas proposed for timber sales or other projects, and monitored murrelet activity in three other areas of interest. The District incorporated guidelines of the Murrelet Recovery Plan into all actions proposed in the Coast Range.

Bald Eagle - The Eugene District completed the McKenzie Resource Area Bald Eagle Habitat Management Plan for the management of designated bald eagle habitat areas. The District began implementing this plan by incorporating road decommissioning recommendations from the plan into timber sale plans. The Eugene District completed mid-winter bald eagle surveys at one McKenzie River location, at the Warner Lake winter roost, at the Coburg Hills roost sites, at Dorena and Cottage Grove reservoirs, and along an 18-mile road transect in the Triangle Lake area and a 31-mile road transect on the mid-Siuslaw River. The District monitored active eaglenests on Osborn Knob (two young fledged), Dorena and Cottage Grove reservoirs (these sites in cooperation with the Oregon Eagle Foundation), Warner Lake (one young fledged), and Mt. Pisgah (two young fledged) (these latter two sites in cooperation with Oregon State University), and at Jones Swamp (this was the second year since the Jones Swamp nest was discovered in 1990 that no eagles nested there).

CANDIDATE AND SENSITIVE SPECIES

The Eugene District, through the efforts of volunteers, compiled *Terrestrial Mollusk Species of the Eugene District, BLM: Surveyors Guide* as both a photographic reference book and a CD-ROM. The District continued to update *Special Status and Special Attention Invertebrates of the Eugene District*, incorporating new taxonomic and range information. The Eugene District monitored activity at four known goshawk nest sites (1,440 acres), and surveyed 30 acres for red-legged frogs, and 200 acres for marten, fisher, lynx and other forest carnivores.

The Eugene District participated in a five-year Challenge Cost Share with Oregon State University, Weyerhaeuser, the U.S. Fish and Wildlife Service, and the Oregon Department of Fish and Wildlife to identify local bat species and examine bat roost strata availability and use. This study found 137 bat roosts through radio telemetry on 51 bats and started to evaluate 95,000 acres of habitat.

Using motion triggered cameras, the Eugene District surveyed 500 acres in the Roman Nose area for the presence of marten and fishers. The Eugene District surveyed 1,000 acres of second growth forest for neotropical migratory birds using auditory tapes. District staff also participated in the fifth and final year of the Oregon Bird Atlas by collecting information on local breeding birds. Through the Challenge Cost Share Program, and in conjunction with Avifauna Northwest, the BLM Salem District, and Willamette Industries, the District monitored the use of regenerated forest stands by the willow flycatcher in the Coast Range. 1999 was the first year of a multi-year study.

SURVEY AND MANAGE SPECIES

The Eugene District helped prepare interagency protocols for the survey of Survey & Manage mollusk species and the red tree vole. The District reviewed survey protocols for mollusks, red tree vole, and lynx, and helped prepare interagency management recommendations for the Oregon *Megomphix* and the red tree vole.

District staff organized and led two interagency training sessions for the identification of mollusk species and the application of survey protocols. The Eugene District surveyed 2,090 acres to protocol for the four Survey & Manage mollusk species that occur in the District, finding 392 occupied sites. The District developed a database for mollusk survey results, entered all 1999 survey data, and began entering 1998 survey data.

The Eugene District surveyed 40 acres for red tree voles (the Smith and Pataha progeny sites). The Eugene District continued to include mitigation measures and management recommendations for Survey and Manage and Sensitive species into all surface disturbing activities.

Protection Buffer Species - No actions for great gray owls or Canada lynx.

The District helped develop interagency survey methods and management recommendations for Survey & Manage mollusk species and the red tree vole.

The District continued to lead a five-year Interior Department program to improve the conservation and management of a United Nations-designated reserve in northern Hondurasunder a grant from the U.S. Agency for International Development.

SURVEY AND MANAGE/PROTECTION BUFFER PLANT SPECIES

The Eugene District has implemented management actions directed by the standards and guidelines under the NW Forest Plan/Eugene District RMP for Survey and Manage/Protection Buffer plant species through fiscal year 1999. Actions accomplished included implementation of Survey Protocols prior to ground-disturbing activities and application of Management Recommendations for target species of concern. Over 1000 acres have been surveyed for SEIS Special Attention (SA) Plant Species on the District in 1999. The total number of SA plant/fungi sites known to occur on the District are listed in Table 18.

SPECIAL STATUS PLANT SPECIES - Survey, monitoring, consultation, and restoration activities occurred for Special Status (SS) Plant Species. Surveys were conducted prior to ground disturbing activities for all SS plants on the Eugene District. Species management was consistent with Eugene District RMP direction for SS plant species. Over 4300 acres were surveyed for SS plants during 1999. Eight SS plants are monitored on an annual basis to determine populations trends. The total number of SS plants sites known to occur on the Eugene District are listed in Table 19. Informal Consultation was initiated on three SS plant species where restoration activities, including woody species removal and nonnative plant species control, is being implemented on Willamette Valley prairie habitat.

The Eugene District is also implementing a native species plant program to develop native seed mixes for a variety of restoration projects. Contracts for both collection of native plant species seed and grow-out projects, to increase yields of native seed, were implemented in 1999.

Table 18 - Total Number of SEIS Special Attention Plant Sites by Species Group

Species Group	Protection Buffer	Survey and Manage Component 1	Survey and Manage Component 2	*Survey and Manage Component 3	*Survey and Manage Component 4
Fungi	168	102	2	NA	NA
Lichens	0	35	0	NA	NA
Bryophytes	141	1	1	NA	NA
Vascular Plant	2	53	53	NA	NA

* Inventory for these species will be conducted through general and regional surveys.

Table 19 - Total Number of Special Status Plant Sites By Species Group

Species Group	Federally Listed	Federal Candidate	Bureau Sensitive	Assessment	Tracking
Fungi	0	0	0	0	12
Lichens	0	0	1	0	5
Bryophytes	0	0	0	1	0
Vascular Plants	9	0	155	36	31

SPECIAL AREAS

Research Natural Area/Area of Critical Environmental Concern (RNA/ACEC)

Defensibility monitoring was conducted at target ACEC/RNAs to identify any unauthorized uses and to respond quickly to mitigate potential negative impacts. Some ecological monitoring occurred at sites that contain SS plant species. Assessment of the Proposed Lower Elevation Headwaters of the McKenzie River ACEC occurred in 1999 and is currently occurring in conjunction with the Middle McKenzie Adaptive Management Planning process. Road closures and exotic plant species inventory and removal occurred at selected Special Areas where negative impacts were observed to be occurring. Installation of long-term ecological monitoring plots is scheduled to be implemented within three ACEC/RNA in FY 2000.

Heceta Sand Dunes ACEC/ONA

The Heceta Sand Dunes ACEC continues to receive unauthorized off-road vehicle use that may be impacting the biological integrity of the ACEC. After review of the preliminary findings of the Resource Evaluation in fall of 1998, the access to the ACEC was posted as closed to motor vehicle use; however, the posted signs were placed to allow vehicle passage over a short (1/10th mile) sand track to allow access from Joshua Lane to the adjoining Forest Service Off-Highway Vehicle (OHV) "open" area. The final Resource Assessment was received in the Fall of 1999. This assessment supports continuation of protective measures for the area.

Motor vehicle use of this area has increased over the past year, continuing the trend that began when the Oregon Dunes National Recreation Area (ODNRA) to the south of Florence begancharging fees to visitors, and enforcing noise restrictions on off-road vehicles using that area. The combined result of user fees and legal restrictions has displaced some former ODNRA users, and some have moved onto the Sutton Creek/Heceta ACEC area. The impact of this OHV user population on the nearby residential area has resulted in numerous complaints to BLM about noise and disorderly conduct by OHV users on the ACEC. Given the nature of many of the OHV users reportedly visiting the area, voluntary compliance with the motor vehicle closure is highly unlikely.

A suitable resolution of the management direction conflict between the Forest Service and BLM in this area is still being explored.

A detailed Biological Resource Assessment was completed in cooperation with The Nature Conservancy for Heceta Dunes ACEC/ONA in 1999 that outlines specific resource values at this site that will guide management direction for this area.

Wild & Scenic Eligible Rivers - All proposed actions in close proximity to eligible or suitable wild and scenic rivers are evaluated for potential affects upon the Outstandingly Remarkable Values (ORV) that caused the river to be eligible for inclusion in the National Wild and Scenic Rivers System. Three suitable and seven eligible river segments remain in interim protected status pending further study or Congressional or Secretarial action. There have been no management actions adversely affecting the status of the ORVs for these rivers.

CULTURAL RESOURCES

Cultural resource inventories were conducted on 1300 acres of BLM administered lands in the Eugene District during FY99. No archaeological sites were discovered as a result of the inventories. No cultural/historic sites in the Eugene District were nominated to the National Register of Historic Places during FY99.

VISUAL RESOURCES

Mitigation measures intended to reduce visual contrasts of management actions include leaving 12-18 trees per acre in Visual Resource Management (VRM) Class III areas and performing an action specific visual contrast analysis for management actions within VRM Class II areas, such as the McKenzie River Special Recreation Management Area and the view sheds of proposed recreation sites. There are no VRM Class I areas designated on the Eugene District. Most of the District's forested lands fall within VRM Class IV, which allows substantial visual contrasts to be created through management actions.

RURAL INTERFACE AREAS

When operating in Rural Interface Areas, the Eugene District has considered the interests of adjacent and nearby landowners in a number of ways including:

1. providing protective no-harvest buffers adjacent to private land to avoid potential damage to structure from windthrow in the residual stand after harvest;

2. leaving 12-18 trees per acre after harvest;

3. protecting private water rights for beneficial uses;

4. using dust abatement measures;

5. contacting all adjacent landowners prior to or during the project initiation process; and

6. providing field trips for adjacent landowners when concerns are identified.

Such activities occur on designated Rural Interface Areas as well as other lands adjacent to private lands where concerns have been voiced.

SOCIO-ECONOMIC

The Eugene District provides employment opportunities for local companies, contractors, and individuals in the implementation of the RMP and NFP. Timber sales, silvicultural treatment projects such as thinning and planting trees, repair of storm damaged roads, the collection of ferns, mushrooms, and firewood, and the recreational use of public lands all provide work opportunities.

As has been mentioned previously, the Eugene District, in coordination with other Federal, State, and local governments, participates in the NFP Jobs-in-the-Woods/Watershed Restoration programs. Eugene BLM awarded new Jobs-in-the-Woods contracts valued at $858,000 during 1999 in two primary areas of emphasis:

Aquatic Conservation Strategy Projects ($491,000)
- Replacement of old culverts that impeded fish passage
- Placement of logs and boulders within streams to improve fish habitat
- Management of vegetation to improve riparian habitat

Upland Vegetation Management Projects ($367,000)
- Creation of snags for wildlife habitat
- Inventory and control of noxious weeds.
- Native species seed collection and grow out to produce a source of seed for restoration projects
- Density management to promote stand characteristics that enhance wildlife habitat

Project identification was based on opportunities described in watershed analyses. Managers selected the highest priority projects for contracting, based on restoration objectives and availability of staff to prepare and manage the contracts. Project planning had to start in many cases a full 2 years prior to award in order to ensure that all clearances, NEPA compliance, designs, and contract preparation steps were completed.

Competition for Jobs-in-the-Woods contracts is limited to bidders located in Pacific Northwest counties affected by federal timber supply policies.

Table 20 - Wild And Scenic Rivers Status

RIVER SEGMENT NAME	STATUS/CLASS	ORV
Siuslaw River - Segment B	Suitable/Recreational	Fish, Wildlife
Siuslaw River - Segment C	Suitable/Recreational	Recreation, Wildlife
McKenzie River - Segment A	Suitable/Recreational	Fish, Recreation, Scenery
Fall Creek	Eligible/Recreational	Fish
Nelson Creek	Eligible/Recreational	Fish
Willamette River	Eligible	State Greenway
Lake Creek - Segment B	Eligible/Recreational	Recreation, Fish
McKenzie River - Segment B	Eligible/Recreational	Fish, Recreation, Wildlife, Scenery
North Fork Gate Creek	Eligible/Recreational	Fish
South Fork Gate Creek	Eligible/Recreational	Fish

Picture Insert #2

Table 21 - RMP - Summary of Socio-Economic Activities and Allocations

PROGRAM ELEMENT	$000 By Fiscal Year			
	1996	1997	1998	1999
District budget	12,939	14,327	14,498	15,300
Timber sale collections, O&C lands	16,493	16,373	8,866	11,710
Timber sale collections, CBWR lands	-0-	-0-	-0-	0
Timber sale collections, PD lands	636	-0-	-0-	0
Payments to Lane County (O&C/CWBR)	11,153	10,729	10,306	9,882
Payments to Lane County (PILT)	208	133	148	127
Value of forest development contracts	890	1,023	970	738
Value of timber sales, oral auctions (# sales)	$12,628 (13)	$13,923 (14)	$11,065 (15)	2,326 (4
Value of negotiated sales, (# sales)	$158 (8)	$132 (14)	$12 (3)	$10 (3
Jobs-in-the -Woods funds in contracts	1,190	1,212	1,865	858
Timber Sale Pipeline Restoration Funds - Timber	-0-	-0-	335	711
Timber Sale Pipeline Restoration Funds - Received	-0-	-0-	396	619
Recreation Fee Demonstration Project receipts	-0-	1	32	34
Challenge Cost Share project contributions and value-in-kind or volunteer efforts	241	295	124	269
Value of land sales	-0-	1	-0-	-0-

Acronyms in table: O&C are Oregon and California Railroad lands; CWBR are Coos Bay Wagon Road lands; PD are Public Domain lands; PILT are Payments In Lieu of Taxes

ENVIRONMENTAL JUSTICE

To comply with Executive Order 12898 of February 11, 1994, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, the Bureau of Land Management, Eugene District, will ensure that the public, including minority communities and low income communities, have adequate access to public information relating to human health or environmental planning, regulations, and enforcement as required by law.

The District will provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with
affected low income and minority communities and improving the accessability of public meetings, crucial documents, and notices.

The District will analyze the environmental effects, including human health, economic and social effects of Federal actions, including effects on minority populations, low income populations, and Indian tribes, when such analysis is required by NEPA.

Mitigation measures identified as part of future EA, Finding of No Significant Impact (FONSI), EIS, or ROD will, whenever feasible, address significant and adverse environmental effects of proposed Federal actions on minority populations, low income populations, and Native American tribes.

RECREATION

The Eugene District's Recreation Management Program includes an ongoing set of base operations as well as a number of activities that respond to changing land management needs and public demand. The base program includes:

- operation and maintenance of 3 campgrounds at Whittaker Creek, Clay Creek, and Sharps Creek;
- group-use and day-use facilities at Shotgun Creek Park and Clay Creek Recreation Site;
- the 14-mile Row River Trail (Rails-to-Trails facility along Dorena Lake);
- boat landings on the McKenzie River at Silver Creek and Rennie; and
- boat landing on the Siuslaw River at Whittaker Creek.

The District manages use of hundreds of dispersed use or undeveloped sites that provide opportunities for a wide variety of user defined recreational activities including motorcycle and horseback riding, hang gliding, shooting, fishing, water-play, camping, sightseeing, etc.

The District also manages a National Recreational Trail at Whittaker Ridge, an interpretive trail at the Tyrrell Seed Orchard, a developed hiking trail at Clay Creek, and Watchable Wildlife sites at the West Eugene Wetlands, Whittaker Creek, Silver Creek, and Lake Creek Falls. Nonmotorized boating and warm water fishing opportunities are provided at Hult Reservoir.

In addition to the base program, the District provides commercial and competitive event permits for bicycle races and tours, off-road motorcycle races, equestrian events, and more.

In FY 1998 the District established all its revenue generating recreation service activities (campgrounds, group use facilities, Special Recreation Permits) as Pilot Fee Demonstration Projects under the authority of the 1995 appropriations bill as amended by the FY 1998 appropriations act. During FY 1998 (year one under the pilot fee demonstration program), public acceptance and cooperation resulted in a 30 percent increase in recreation revenues over the previous year. During FY 1999 revenues continued to increase, however at a less dramatic pace.

Watchable Wildlife - The District refurbished the McKenzie River Watchable Wildlife platform in 1998 and installed a vault toilet and information/bulletin board; upgraded a wildlife photography blind in the West Eugene Wetlands; and constructed over 800 feet of trail. Biologists from the District addressed approximately 400 students (elementary school through University level) regarding wildlife and the roles of biologists in their management; made a presentation on Wildlife Tree Enhancement; and produced and published an updated Eugene Wetland Self-guided Tour booklet and a color brochure about the project.

VOLUNTEERS - The contribution of volunteers to the District overall and to the recreation program specifically is substantial. Recreation program volunteers typically fall into one of 3 types - campground hosts, Row River Trail Adopt-a-Trail program participants, and project-specific volunteers (such as those who helped build segments of the Clay Creek Trail and McGowan Creek cleanup participants, etc.).

Fee Demonstration Sites - In FY 1998 the Eugene District designated all Special Recreation Management Areas (SRMA) and dispersed use areas Fee Demonstration Areas. This designation was accomplished with the cooperation and support of the Association of O&C Counties. The result is that all revenues generated through the District's recreation program are kept

Table 22 - Recreation Program Statistics

ITEM	FY 1995-1996	FY 1997	FY 1998	FY 1999
Public Land Visitors	1,603,530/ 2,078,000	2,140,340	2,204,500	894,948
Campsites Operated	61	61	61	61
Miles of Maintained Trail	23	23	23	23
Special Recreation permits	5/8	8	7	10
Recreation Permit Revenues	$27,428/$25,595	$24,159	$31,938	$41,978

Table 23 - VOLUNTEERS

ITEMS	FY 1996	FY 1997	FY 1998	FY 1999
Number of Volunteers	219	221	266	277
Volunteer Hours	23,000	31,000	36,000	35,100
Value contributed	$276,000	$363,000	$422,000	$400,000
Rec. Volunteers	113	91	110	174
Rec Volunteer Hours	6,200	5,700	7,100	12,700
Rec. Value contributed	$48,000	$51,000	$55,000	$75,000
Special One-time Recreation Volunteer Projects	Tyrrell Forest Succession Trail; ETRA OHV trails survey; COPS cleanup; RRT	Tyrrell Forest Succession Trail; Clay Creek Trail	Wetlands Interpretive Boardwalk; OET horse trail evaluation	National Public Lands Day trail; Clay Creek Tables; McGowan Creek Trail.

on the District and will be used for the recreation program and facility operations, enhancements, maintenance, and fee collection activities. The following table shows the results of the FY 1999 Fee Demonstration program operations.

OFF-HIGHWAY VEHICLE MANAGEMENT (OHV)

Trails inventories, condition surveys, and sediment control mitigation are underway in the Mohawk Recreation Management Plan area. Approximately 8 miles of OHV trail have been modified with sediment control structures.

The off highway vehicle damage mitigation conducted at Horserock Ridge ACEC/RNA (fence and sign installation) appears to have halted OHV use of that sensitive area.. The rock barriers placed at Hult Reservoir to discourage motorized vehicle damage to wetlands and camping areas along the west and south sides of the reservoir continue to be effective in halting additional vehicle damage to these fragile sites.

In FY 1999 the BLM Off-Highway Vehicle designated area to the northeast of Florence, nearCollard Lake, was posted to show visitors where public land boundaries are located and to discourage trespass on adjoining private lands. This was accomplished in cooperation with the Siuslaw National Forest, Mapleton Ranger District, following a series of public meetings in 1998 that were held to gain public awareness and cooperation.

Table 24 - Fee Demonstration Program

Fee Demonstration Area	FY 1998 Fees Collected	FY 1999 Fees Collected	Fee Demo Permit Site Name
Eugene General - OR05	$ 419	$1,280	Special Recreation Permits
Shotgun SRMA - OR17	$10,230	$17,430	Group Shelters
Siuslaw River SRMA - OR18	$ 9,997	$11,733	Whittaker Creek Campground
Siuslaw River SRMA - OR18	$1,011	$1,256	Special Recreation Permits
Siuslaw River SRMA - OR18	$ 639	$710	Clay Creek Picnic Shelters
Row River SRMA - OR19	$2,451	$2,782	Sharps Creek Campground
Siuslaw River SRMA - OR18	$6,999	$6,037	Clay Creek Campground

Unauthorized Off-Highway Vehicle use of the Heceta Dune area, which is designated “Closed” to off-highway vehicles, continued throughout FY 1999. New signs describing the resource values, need to avoid motor vehicle use, and map showing alternative OHV use opportunities was produced and readied for posting at the Joshua Road Access point.

Off-Highway Vehicle Areas - There is no formally dedicated off-highway vehicle use area on the Eugene District. The Low-Pass area and the Shotgun-Mohawk areas are popular with Off-Highway Vehicle enthusiasts, and both areas receive heavy use and are crossed by a proliferation of informally established trails. Most of these trails follow disused timber haul roads and overgrown railroad grades, with short connector trails between the more stable roadbed segments. A few trails have literally been newly created across previously unroaded lands. Most of the trails cross or use private lands adjoining BLM lands.

Mohawk RAMP implementation got underway in FY 1999, and new portal signs were designed for the Shotgun and McGowan Creek roads.

DEVELOPED RECREATION SITES

The Eugene District operates 9 developed recreations sites that include 61 family camping units at campgrounds at Whittaker Creek, Clay Creek, and Sharps Creek; 4 group picnic shelters at Clay Creek (2) and Shotgun Creek Park (2); picnic area at Shotgun Park; swimming beaches at Clay Creek and Shotgun Park; a multi-modal (hiking, bicycling, equestrian) surfaced trail at Dorena (Row River Trail); and paved boat landings at Whittaker Creek, Silver Creek, and Rennie. Interpretive signing, a paved boat ramp, and a toilet were installed at the Silver Creek Landing. The Row River Trail became operational in FY 1997 with asphalt paving of its entire length and development of primitive trail heads. The Mosby Creek Trailhead was built in FY 1999. The new parking lot at the Lower Lake Creek site at Lake Creek Falls was contracted in FY 1999 and construction begun.

DEVELOPED TRAILS

There are several trails on the District. The Old Growth Ridge National Recreation Trail runs from the Whitaker Creek Campground to a ridge bearing a number of big trees. Plans are being considered for building additional trail to create a return loop for visitors.

The ***Clay Creek Trail*** at Clay Creek Recreation Site was completed in FY 1996 and is undergoing improvement including construction of a pedestrian bridge.

At Shotgun Park there are nearly 5 miles of hiking trail.

The ***Row River Trail*** has received a number of improvements including trailside parking areas and access fencing in FY 1996, paving and installation of 3 toilets in FY 1997, rest areas at scenic points in FY 1998, and major Trailhead construction at Mosby Creek in FY 1999.

A system of OHV trails in the Mohawk area that had been created by 4-wheel drive and off-road motorcycle enthusiasts in the past are being inventoried and planning has been initiated for rehabilitation of environmentally sensitive portions of several trails. A Transportation Management Plan for the area was initiated in FY 1998. Work on the Transportation Plan continued through FY 1999.

SPECIAL RECREATION MANAGEMENT AREAS (SRMA)

The Eugene District has 7 Special Recreation Management Areas (SRMAs), 6 of which were designated in the ROD. Eventually all of these areas will be covered by Recreation Area Management Plans (RAMPs).

EXTENSIVE RECREATION MANAGEMENT AREA (ERMA)

The remainder of the public lands within the Eugene District fall under the category of Extensive Recreation Management Area (ERMA). Generally, this is public land that is usually available for dispersed recreation use; however, there are no developed facilities, and no special management attention is directed toward such areas. An exception to this rule is the Mohawk area, which lies within the ERMA and, because of high public use and recreation management needs, receives more intensive recreation management than is typical of an ERMA. The following table shows the status of the recreation management areas.

Back Country Byways - In the RMP a total of 9 routes were identified as having potential for designation as Back Country Byways. To date none of these routes has been designated.

TIMBER RESOURCES

Introduction - Timber Sales in accordance with the Eugene RMP began in Fiscal Year 1995. During FY 1999 volume offered by the Eugene District was reduced below the Probable Sale Quantity (PSQ) as a result of the August 2, 1999 finding by Judge Dwyer that the BLM had not implemented the survey and manage surveys as required by the Forest Plan.

Table 25 - Special Recreation Management Areas

SRMA NAME	SIZE in Acres (Approx)	STATUS OF RAMP
Siuslaw River SRMA	9,529	None/not planned
Lower Lake Creek	2,090	Completed FY 1998
Upper Lake Creek	10,515	Initiated FY 1996
Row River	11,257	Completed FY 1995
McKenzie River	2,178	On hold since FY 1995
Shotgun Park	277	Not planned
Gilkey Creek	375	Not planned
Eugene Extensive Recreation Management Area	281,000	Mohawk plan completed FY 1998. Remainder not planned.

Sale Methods - The Eugene timber sale program is composed of a number of different elements. The **first** and primary element is the advertised sale program. These are sales that are advertised and competitively bid at auctions held typically on the 4th Thursday of the month. Most of the District timber volume is sold in this manner.

Second, timber is sold by negotiated sale to permit construction of roads across BLM lands in accordance with District Right-of-Way agreements and permits.

Third, some miscellaneous volume is sold to small operators where a competitive sale is not feasible due to size, location, or other factors. Included are small amounts of trees sold to facilitate safe logging operations on adjacent private lands, and trees endangering dwellings or roads.

Fourth, volume is sold as a modification to existing sales, such as corridor volume in commercial thinnings to permit logging operations to occur in a safe and economical manner.

Volume Accounting - Volume sold under the above 4 sale methods is divided into 2 types. The first type is what is known as PSQ (probable sale quantity) or chargeable volume and is the volume that has been computed to be the sustainable level that those lands can produce under the standards and guides within the RMP.

The second type of volume is termed Non-PSQ volume. This volume is produced incidentally from lands reserved from planned harvest under the Northwest Forest Plan and the RMP. Examples of this type of volume might be sales designed to adjust stand densities in LSRs to accelerate development of late-successional forest, or such projects as Riparian Reserve treatments.

HARVEST METHODS - A number of harvest methods are employed in the Eugene District.
These consist of regeneration harvest, commercial thinning, density management, selective, clear cut, and salvage. Definitions of each of these types of harvest are shown in the Glossary.

The tables shown on the following pages are summarized at a District level. A more complete analysis of the volumes harvested and a comparison of these actual harvests with the computer projections of the decade's harvest will be completed as part of the 3rd year evaluation that is expected to be completed in the summer of 1999.

Table 26 - Harvest Volume (mmbf) Offered FY 95-99

Land Use Allocation	FY 1995	FY 1996	FY 1997	FY 1998	Offered FY99
GFMA	15.6	23.9	26.6	23.6	6.9
Connectivity	2.2	5.3	10.9	8.6	0.4
AMA	0.1	0.1	0.1	0	0
Total PSQ Volume	17.9	29.3	37.6	32.2	7.3
Riparian Reserve Vol.	0.2	0	0.1	3.8	0.5
Hardwood Volume	0.1	0	0.3	0.3	0
LSR Volume	0	0.7	0.3	2.7	0.1
Total Volume	18.2	30.0	38.3	39.0	7.9
FY Target Volume	19	30	36	36	36

Note: Does not include Special Forest Product sales of saw timber rounded to nearest .1MMBF

Table 27 - Regeneration Harvest Volume

Land Use Allocation	FY 1995	FY 1996	FY 1997	FY 1998	MMBF FY 99
GFMA	14.8	23.4	22.0	10.0	4.0
Conn	0.4	3.6	4.9	5.8	0
AMA	0.1	0.1	0	0	0
Riparian Reserve	0	0	0	.3	0
LSR	0	0.3	0.3	0.1	0

Note: Regeneration Volume includes Right-of-way volume. These volumes do not include hardwood volume.
All volumes are rounded to nearest .1 MMBF

Table 28 - Thinning and Density Management Harvest Volume

Land Use Allocation	FY 1995	FY 1996	FY 1997	FY 1998	MMBF FY 98
GFMA	0.7	0.5	4.7	15.2	2.8
Conn	1.8	1.5	6.0	1.2	0.4
AMA	0	0	0	0	0
Riparian Reserves	.2	0	.1	3.4	0.5
LSR	0	.5	.2	2.7	0.1
TOTALS	2.7	2.5	11.0	22.5	3.8

Note: This table contains both commercial thinning and density management thinning in connectivity and reserved land use categories. Thinning volumes include selective harvest volume since the vast majority of such volume is generated as a result of yarding corridors needed to harvest thinning units. Does not include Special Forest Products.

Table 29 - Regeneration Acres

Land Use Allocation	FY 1995	FY 1996	FY 1997	FY 1998	ACRES FY 99
GFMA	400	703	737	285	105
Conn	12	110	150	218	0
AMA	1	0	1	0	0
Riparian Reserve	0	0	0	10	1
LSR	1	7	10	6	0
TOTALS	414	820	898	519	106

Acres shown include right-of-way acres.

Table 30 - Thinning And Density Management Acres

Land Use Allocation	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
GFMA	88	21	245	1011	166
Conn	199	146	285	75	0
AMA	0	0	0	0	0
Riparian Reserves	0	0	4	214	41
LSR	0	58	0	188	33
TOTALS	287	225	534	1488	240

Conclusions - During Fiscal Year 1999 little timber was offered for sale due to the combination of ESA consultation and the finding on August 2, 1999 by District Court Judge Dwyer that the BLM had improperly implemented the survey and management requirements contained within the Northwest Forest Plan.

A formal evaluation of the RMP and the forestry program is currently nearing completion. This evaluation is expected to be completed in the spring of 2000.

Table 31 - FY 1999 Timber Sales

SALE NAME	RESOURCE AREA	VOLUME (MBF)	VOLUME (CCF)	MONTH SOLD
Smith Creek Thinning	South Valley	22	45	May
Upper Harms	South Valley	2737	5019	July
Pataha Thinning	Coast Range	38	147	July
Badger One	Coast Range	3467	5815	July
TOTALS		**6264 (6.3MBF)**	**11026 (1.1 MCF)**	

Note: Only advertised sales are shown. No modifications, negotiated sales, or other misc. volume is included. Volume shown is total sale volume.

SILVICULTURE

A variety of silviculture systems were implemented in FY 1999. Silviculture treatments are designed to meet a wide range of management objectives. These objectives vary according to theland use allocation. Silviculture treatments are selected to meet the ecological requirements of the communities of plants and animals and the physical characteristics of the site. The selection of the silvicultural treatment also depends on the current condition of the forest stand.

There are six general types of silviculture treatments - regeneration harvest with partial retention, site preparation following harvest, reforestation, management of young stands, commercial thinning in mid-aged stands, and management of overstory trees, snags, and large woody debris. **Table 1** includes a summary of the silviculture treatments that were accomplished in FY 1999.

Table 32 - Summary of Silviculture Treatments and Decadal Commitment

Silviculture Practices	Average Annual Acres (1996-1999)	Annual Commitment From Resource Management Plan
Site Preparation prescribed fire	70	1070
Site Preparation - other	499	350
Vegetation Control	1003	340
Animal Damage Control	583	600
Pre Commercial Thinning	3975	590
Brushfield/Hardwood Conversion	8	50
Planting/regular stock	332	0
Planting - genetically improved stock	207	680
Fertilization	605	1670
Pruning	38	630

PIcture

Table 33 - 1996 to 1999 Summary of Silvicultural Accomplishments

TREATMENTS	TYPE	UNITS	1996	1997	1998	1999	To-tal
Planting	Initial	acres	468	497	1071	305	2341
	Replant	acres	0	241	71	466	778
Site Preparation	Burning	acres	40	216	0	25	281
	Manual	acres	106	30	113	84	333
	Mechanical	acres	572	295	496	300	1663
Seedling Protection	Tubing	acres	10	88	0	0	98
	Shading	acres	17	0	0	17	34
	Netting	acres	395	645	1035	122	2197
Vegetation	Maintenance	acres	1155	1259	594	1004	4012
	Release	acres	1477	1964	356	133	3930
Precommercial Thinning	Manual	acres	4494	3768	5139	2500	15901
Pruning	Manual	acres	0	0	153	0	153
Fertilization	Broadcast	acres	0	0	0	2418	2418
TOTALS			8734	9003	9028	7374	

FY 1999 - 195 acres (64%) of the 305 acres of initial planting were with genetically improved stock, and 214 acres (46%) of the replanting was with genetically improved stock. The silviculture projects were accomplished with contracts totaling approximately $618,000.

SPECIAL FOREST PRODUCTS (SFP)

Interest in SFP increased for a few years from 1996 through 1998 and has slightly leveled off. The mushroom and floral green sales declined in FY99. The decline was probably due to unfavorable weather conditions; however, they remain a major part of the harvested products. Firewood permits have increased due to better management of selected harvest units and utilization of alternative sources for firewood such as roadside cleanup of storm debris.

To help sustainability of SFP, the District has not allowed harvesting within Riparian Reserves, and has not allowed harvest of mosses in LSRs pending the completion of a District wide EA (Environmental Assessment) for the Special Forest Products Program. A research project was implemented by Oregon State University (OSU) studying the recovery rates and sustainability of moss harvest. Results from this research will help guide management of this resource.

Table 34 - RMP - Summary of Special Forest/Natural Product Actions and Accomplishments

RMP Authorized product sales	Unit of measure	Fiscal Year 1996 * Units/contracts/value	Fiscal Year 1997 Units/contracts/value	Fiscal Year 1998 Units/contracts/value	Fiscal Year 1999 Units/contracts/value	3-year total Units/contracts/value
Boughs, coniferous	Pounds	1,050/3/$20.60	400/3/$4.75	700/3/$16.00	600/2/$6.00	2150/9/$41.35
Burls and miscellaneous	Pounds	0	20/1/$3.00	1,020/2/$103	0/0/0	1040/3/$106.00
Christmas trees	Number	109/109/$545.00	65/65/$325.00	127/127/$635.00	88/88/$440	301/301/$1,505.00
Edibles and medicinals	Pounds	1,835/8/$90.75	540/1/$26.20	5,900/10/$291	675/6/$54	8,275/19/$407.95
Feed & Forage	Tons	0	0	0	0	0
Floral & greenery	Pounds	27,955/84/$1,952.85	45,560/170/$3,160	142,000/329/$10,348	103,070/247/ $7,193.80	215,515/583/$15,469.85
Moss/bryophytes	Pounds	16,978/31/$530.45	10,326/25/$341.70	22,829/56/$693	13,600/26/$408.00	50,133/112/$1,565.15
Mushrooms/fungi	Pounds	5,240/68/$1,303.75	9,900/117/$3,677.00	14,955/209./$3,734.75	12,353/164/$3,173.96	30,095/394/$8,715.50
Ornamentals	Bushels	0	0	0	0/0/0	0
Seed and seed cones	Number	0.3/1/$18.75	10/1/$5.00	0	0/0/0	10.3/2/$23.75
Transplants	Number	220/7/$42.00	590/21/$118.60	305/14/$46.80	1,139/18/$154.30	1,115/42/$207.40
Wood products/ firewood **	Cubic feet	88,893/135/$2,367.00	110,887.8/150/ $3,307.59	61,205/109/$2,112.60	28,528.8/211/ $3,961.00	260,985.8/394/$7,787.19

* Value is in dollars per year received.

** To avoid double counting, line does not include products converted into and sold as either board or cubic feet and reported elsewhere.

TABLE 35 - Cumulative Summary Report of Negotiated Cash Sales Eugene District - FY 1999

PRODUCT	QUANTITY	UNIT OF MEASURE	NUMBER OF CONTRACTS	VALUE RECEIVED $	MAINTENANCE FEES ($) COLLECTED
Boughs - Coniferous	600	Pounds	2	6.00	2.00
Burls & Miscellaneous	0	Pounds	0	0.00	0.00
Christmas Trees	88	Number	0	440.00	0.00
Edibles & Medicinals	675	Pounds	6	54.00	6.00
Feed & Forage	0	Tons	0	0.00	0.00
Floral & Greenery	103,070	Pounds	247	7,193.80	713.73
Mosses - Bryophytes	13,600	Pounds	26	408.00	42.46
Mushrooms - Fungi	12,353	Pounds	164	3,173.96	311.53
Ornamentals	0	Number	0	0.00	0.00
Seed & Seed Cones	0	Bushels	0	0.00	0.00
Transplants	1,139	Number	18	154.30	14.33
Wood Products - SFP	28,528.8	Cubic Feet	211	3,961.00	365.68
Wood Products - (not SFP) Saw timber	12,113.3	Cubic Feet	30	27,436.88	223.80
Current Totals - SFP ONLY			678	$14,951.06	$1,455.73
Current Totals - All Products			710	$42,387.94	$1,679.53

NOXIOUS WEEDS

The noxious weed program on the Eugene District has a prevention plan based on the encroachment of new noxious weeds, and restricts and/or decreases noxious weed infestations on BLM administered land using an integrated best management approach. The District integrated pest management program includes chemical, mechanical, manual, and biological methods. All methods are used in accordance with BLM's *1985 Northwest Area Noxious Weed Control Program Impact Statement*, 1987 Supplement, and respective Records of Decision. The Eugene District has an ongoing survey program for species identification and cooperates with the Oregon Department of Agriculture in reporting new infestations and obtaining new information on weeds and new biocontrols.

Table 36 - Integrated Noxious Weed Management

Treatment	Species	FY96 Acres	FY97 Acres	FY98 Acres	FY99 Acres
Manual	Scotch broom	20	8	128	77
	Meadow knapweed	18	18	11	12
Biological	Scotch broom	0	0	60	100
	Meadow knapweed	0	0	5	5
Chemical	Scotch broom	0	0	0	0
	Meadow knapweed	0	0	0	0

FIRE/FUELS MANAGEMENT

Table 37 - Fire and Fuels Management

Total Treatment Acres - FY 1996-1999					
Treatment Type	FY 1996	FY 1997	FY 1998	FY 1999	Total
No Treatment	0	16	777	78*	871**
Mechanical	0	152	454	300	906
Manual	0	0	82	84	166
Broadcast burning	0	0	0	25	25

* Includes 49 acres of commercial thinning.
** Includes 584 acres of commercial thinning.

FY 1999 on District fires: 12 fires for a total of 268.1 acres.

Table 38 - Fire Management

Eugene District Fires 1996-1999					
General cause	1996	1997	1998	1999	To-tal
Lightning	2	0	2	1	5
Human caused	4	3	4	11	22

Eugene District personnel and resources were dispatched to a total of 109 fires during the 1999 fire season.

ACCESS AND RIGHTS-OF-WAY

New legal access has been acquired through renewal of an existing term easement and through amendment of existing reciprocal right-of-way agreements. Activity for FY 1999 is displayed in the table below.

Two new reciprocal Right-of-Way agreements were completed in FY97: a small one to provide access to a proposed timber sale in the McKenzie Resource Area, and another to replace an old existing agreement that was difficult to administer because of its lack of detailed terms and conditions.

Table 39 - Reciprocal Right-of-Way Agreements

	FY96	FY97	FY98	FY99
EASEMENTS				
New Easements Acquired	1	1	1	1
Releases & Terminations	1	0	0	0
RECIPROCAL AGREEMENTS				
New Agreements Completed	0	2	0	0
Amendments	5	6	2	3
Assignments	11	0	6	1
Releases & Terminations	1	4	0	0

Rights-of-Way - Applications for rights-of-way across BLM administered lands have been received and processed under the RMP/ROD at a relatively low but consistent rate. New authorizations were predominantly for use of existing roads for log hauling and for legal ingressand egress to private land, but also included one existing water line. There were no requests for new communication sites or for hydroelectric or surface water developments. Case activity for the fiscal year is displayed in the following table:

Transportation/Roads - The Western Oregon Transportation Management Plan (OTMP) was completed in 1996. One of the stated objectives of the plan is to comply with ACS objectives. As part of the watershed analysis process, road inventories and identified drainage features that may pose a risk to aquatic or other resource values are discussed and documented.

The activities that are identified in watershed analyses as a recommendation include:
- surfacing dirt roads
- replacing deteriorated culverts
- replacing log fill culverts
- replacing undersized culverts in perennial streams to meet 100-year flood event.

Other efforts were made to reduce overall road miles by closure or elimination of roads (decommission, or full decommissioning). The terms to describe the two types of decommissioned roads are:

Decommissioned - Road segments closed to vehicles on a long-term basis, but may be used again in the future. The road is left in an "erosion resistant" condition by establishing cross drains and removing fills in stream channels and potentially unstable fill area. The road is closed with a tank trap or equivalent.

Full Decommission - Roads determined through an interdisciplinary process to have no future need would be subsoiled, seeded, mulched, and planted to reestablish vegetation.

Natural hydrologic flow would be restored.

To protect the remaining high quality habitats, existing system and nonsystem roads within Key Watersheds should be reduced through decommissioning or a reduction in road mileage. The intent is to have no net increase in the amount of roads in Key Watersheds. The following table lists the Key Watersheds in the Eugene District and road mileage in them before the NFP and in 1999.

Table 40 - Rights-of-Way Agreements and O&C Road Permits

	FY96	FY97	FY98	FY99
Rights-of-Way				
New Cases Processed	3	5	5	5
Amendments	1	4	1	1
Assignments	2	2	2	2
Relinquishments & Terminations	3	5	1	4
O&C Road Permits				
Permits Processed or Extended	18	14	8	9
Amendments	0	0	0	0
Assignments	2	0	2	1
Relinquishments & Terminations	13	30	12	10

Table 41 - Roads (Decommissioned)

	FY 1996	FY 1997	FY 1998	FY 1999
Decommissioned (miles)	0	3.59	4.46	0
Fully Decommissioned (miles)	4.02	7.05	1.83	5.12

Road Maintenance - Heavy rains in December all the way through February caused more storm related damage in FY 99. The road maintenance crews completed 5 emergency repairs in the Coast Range. Crews were busy from spring to fall work season completing ERFO repairs, special projects, keeping up with active hauls, and still tried to maintain some sort of general maintenance program in FY 99. General Maintenance work has increased due to heavy storms in the last two years as well as continuing backlog. The following is the work road crews did this past year.

Table 42 - General Road Maintenance Accomplishments

Total Roads Maintained	667 miles
Grade Road Surface	187 miles
Clean Drainage (ditches)	353 miles
Cut Brush	409 miles
Clear Right/Way debris	20,599 cubic yards, Includes ERFO repairs
Culverts cleaned	1,968 each
Crushed patch rock	12,056 cubic yards hauled
Pit Run rock hauled	1,156 cubic yards
Hot Mix patch material	1,525 tons
Broom Asphalt surface	84 miles
Roads Snow Plowed	0 miles

Table 43 - Road Status in Key Watersheds

KEY WATERSHED	FY 94 MILES OF ROAD	FY 98 MILES OF ROAD	FY 99 MILES OF ROAD	NET GAIN/DECREASE
Bear Marten	81.3	82.3	82.3	* +1.0
Upper Smith River	7.4	7.4	7.4	0
Steamboat Creek	0.5	0.5	0.5	0
North Fork Smith River	0.6	0.6	0.6	0
Total Miles	89.8	90.8	90.8	* +1.0

Note: The 1.0 mile increase in road mileage in this key watershed was the result of a pre-Forest Plan timber sale that was sold and unawarded in November 1991. This sale, Martin Power, was later awarded unmodified from its original design in October 1995 under the authority of the Rescissions Act. Road construction and timber harvest occurred in 1996. Eugene District does not have any land in the Upper Lobster Creek Watershed.

ENERGY AND MINERALS

There were no plans of operations submitted for FY 96, 97, 98, or 99 and no mining notices received. Mining claim compliance inspections numbered **10** for FY 96, **30** for FY 97, **15** for FY 98, and **5** for FY 99. Mineral permit sales numbered **21** for FY 1999.

LAND TENURE ADJUSTMENTS

There were no land sale or exchange transactions completed during FY99. See Table 45 forstatistics on the land tenure changes and land use authorization/realty trespass case activities during the period. The table does not include data for lands purchased with Land and Water Conservation Fund money for the West Eugene Wetlands Project (WEW) because the WEW is managed under the West Eugene Wetlands Plan rather than the Eugene RMP.

There were no title transfers under the *Color-of-Title Act* or the *Recreation and Public Purposes Act*. There were also no land transfers to or from other public agencies (see Table 17 of the RMP/ROD). The recommended transfers between BLM and the U.S. Forest Service would require legislation from Congress.

A small number of Temporary Use Permits (TUP) were issued or renewed during the fiscal year to authorize rock stockpiling in existing stockpile sites. One permanent easement was granted to authorize sand dune modification on a small parcel of public land in Florence.

Table 44 - Land Tenure, Temporary Use Permits, and Trespass Cases

LAND SALES	FY96	FY 97	FY 98	**FY 99**
Sale Transactions Completed	0	1	0	0
Acres Sold	0	0.37	0	0
LAND PURCHASES/DONATIONS				
Transactions Completed	0	0	0	3
Acres Acquired	0	0	0	2
LAND EXCHANGES				
Exchange Transactions Completed	2	2	2	0
Acres Transferred	200	0	0	0
Acres Acquired	174	359	0	0
TEMPORARY USE PERMITS				
Cases Processed	5	3	2	3
Leases/Easements				
Cases Processed	0	0	0	1
REALTY TRESPASS				
Cases Processed	**4**	**5**	**2**	**1**

Table 45 - Land Exchange Land Status and LUA Changes

O&C In	O&C Out	PD In	PD Out	GFMA In	GFMA Out	LSR In	LSR Out	AMA In	AMA Out
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table 46 - NO NET LOSS REPORT

TYPE OF ACTION (sale, purchase, exchange)	Name/Serial Number	ACQUIRED ACRES					DISPOSED ACRES				
		Land Status		Available for Timber Harvest			Land Status		Available for Timber Harvest		
		O&C	CBWR	O&C	CBWR	PD	O&C	CBWR	O&C	CBWR	PD
Purchase	OR 49776	0	0	0	0	0					
Purchase	OR 54350	0	0	0	0	0					
Purchase	OR 54424	0	0	0	0	0					

No Net Loss Policy - Section 3 of Public Law 105-321 established a policy of "No Net Loss" of O&C and Coos Bay Wagon Road (CBWR) lands in western Oregon. The Act requires that, when selling, purchasing, and exchanging land, the Bureau of Land Management (BLM) may neither 1) reduce the total acres of O&C and CBWR lands nor 2) reduce the number of acres of O&C, CBWR, and Public Domain land that are available for timber harvest below what existed on October 30, 1998. The Act requires BLM to ensure that the acres have not been reduced on a 10-year basis.

Table 45 lists the land status and available timber harvest acreage changes resulting from land sales, purchases (including donations), and exchanges completed between October 30, 1998 and September 20, 1999.

Withdrawals - Table 18 and Appendix L of the RMP/ROD contain 34 recommendations for making new withdrawals from the public land laws and the mining laws, for revoking existing withdrawals, and for modifying existing withdrawals. None of these actions were completed in FY 1999. Implementation of the recommendations has been delayed due to realty work load priorities, but is expected to be accomplished gradually over a number of years as work loads permit.

HAZARDOUS MATERIALS

There was one emergency response incident where the emergency response contractor was utilized to investigate/remove abandoned hazardous wastes from the public lands with a cost of $985. Approximately 30 incidents of illegal dumping of household garbage and similar solid wastes were investigated that contained no hazardous wastes. Four Hazardous Materials Contingency Plans to be used at District Facilities were completed for District Manager Signature. Eleven environmental site assessments were completed to determine the likelihood of the presence of hazardous substances or petroleum products on lands to be acquired by the United States prior to the acquisition of the land.

COORDINATION, CONSULTATION

Consultation and coordination with all levels of government have been ongoing and are a standard practice in the Eugene District. On the federal level, the District consults with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service on matters relating to federally listed threatened or endangered species. The District coordinates its activities with the U.S. Forest Service on matters pertaining to the Central Cascades AMA and also through development of interagency watershed analyses. State level consultation and coordination occurs with the State Historic Preservation Office for Section 106 compliance, and with Oregon Department of Forestry, Oregon Department of Fish and Wildlife, and Oregon Division of State Lands (primarily for Coastal Zone consistency determinations). On a local level, the District consults with Native American tribal organizations, Lane County, and Lane Council of Governments.

RESEARCH AND EDUCATION

The Cooperative Forest Ecosystem Research project (CFER) is a program initiated in June 1995. Cooperators in this program are the Bureau of Land Management, Forest and Rangeland Ecosystem Science Center (FRESC) of the United States Geological Survey, the College of Forestry at Oregon State University (OSU), and the OSU College of Agricultural Sciences. The intent of this program is to facilitate ecosystem management in the Pacific Northwest with an emphasis on

meeting BLM priority research information needs in western Oregon. CFER research will address short-term information needs within the context of conducting integrative, long-term ecological research.

Response to a National assessment of BLM research information needs in 1996 established the foundation and initial general direction of the CFER program. In the assessment BLM identified the highest priority need as research information to support the implementation of the Northwest Forest Plan with 3 specific subcategories of interest: (1) determining how biodiversity of young forest stands compares/contrasts in managed and natural conditions, (2) ecology and management of riparian zones, (3) assessing habitat needs and protection for survey and manage and other special interest species.

A research problem analysis completed in 1997 helped focus and direct this research program and started the initiation of new projects as well as, where possible, the integration of existing research into the CFER program. On-going research in 1999 will continue and expand upon existing topics and will include (1) biotic response to changes in stand structure, (2) production and function of large wood in the riparian zone, and (3) effects of landscape pattern and composition on species.

Research - The following research project is currently underway on the Eugene District:

Density Management Study - The BLM, Oregon State University, the U.S. Geological Survey's Biological Resources Division, and the U.S. Forest Service Pacific Northwest Research Station have developed the Density Management Study to research various aspects of the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*. Objectives of the Density Management Study include determining how to manage relatively young (30 to 70 yrs.) forest stands to accelerate the development of late-successional forest structural characteristics; research on the response of lichens, bryophytes, and amphibians to density management treatments; and monitoring the effects of density management in riparian areas on micro-climate and riparian-associated species. The Density Management Study is currently being implemented on 3 sites in the Eugene District: Bottomline, Perkins Creek, and Ten High.

The **Bottomline** project area is located in Section 1, Township 21 South, Range 5 West, in the South Valley Resource Area of the Eugene District (EA-OR-090-94-28). The project area is in the Connectivity/Diversity Block portion of the Matrix land use allocation. The timber to implement the density management thinning treatments at Bottomline was sold, and harvesting has been completed. Research and monitoring are on-going at this time.

The **Perkins Creek** project area is located in Section 27, Township 21 South, Range 2 West, in the South Valley Resource Area (EA-OR090-98-9). The project area is in the Connectivity/Diversity Block portion of the Matrix land use allocation. The Perkins Creek project area is one of 7 "rethinning" sites in the Density Management Study. These 7 sites were selected from among managed stands that were commercially thinned, have abundant advanced conifer regeneration (i.e., young trees growing in the understory), and have reasonable road access. The timber to implement the density management thinning treatments at Perkins Creek has been sold, but harvesting has not yet occurred.

The **Ten High** project area is located in Sections 10 and 15, Township 15 South, Range 7West, in the Coast Range Resource Area (EA-090-98-11). The project area is in the General Forest Management Area of the Matrix land use allocation.

More detailed descriptions of the Density Management Study are provided in the research study plans that are contained in the project analysis files for the Bottomline, Perkins Creek, and Ten High timber sales.

Other Research

- Adaptive management monitoring of northern spotted owls in young forest stands;
- Influence of landscape characteristics on abundance and habitat use of bats;
- Long-term fertilizer studies on growth and development of Douglas-fir; and
- Response of amphibians to landscape and stand conditions.

EDUCATION - The Eugene District encourages the use of the Forest Succession Trail at the Travis Tyrrell Seed Orchard as a outstanding opportunity for environmental education. The interpretive trail allows visitors to learn about forest succession, experience forest dynamics, become familiar with tree and plant species native to the area, and understand natural cycles and how they benefit all species.

Eugene District

The Eugene District is an active partner with Oregon Trout and Oregon Department of Fish and Wildlife in the award-winning Salmon Watch program. The program helps facilitate and coordinate community service projects, teacher training, curriculum, and on-site field trips for middle and high school students. Over 500 local students participate annually in the program, which includes visits to BLM sites at Whittaker Creek and/or Fish Creek Watchable Wildlife Viewing areas.

The District's Environmental Education program utilizes numerous employees to participate in 10-15 activities each year. The activities include: hosting field trips for schools or Scout Troops, providing presentations at service clubs or in the classroom, and facilitating the popular Kidstart Project, which places student art in the District office. Approximately 500-1000 students and 100-200 adults participate in these types of activities each year.

INFORMATION RESOURCE MANAGEMENT

GIS Section in the APS - The BLM in Western Oregon made a substantial investment in the building of a Geographic Information Systems (GIS) as it developed the Resource Management Plans (RMPs). This information system has allowed the BLM to organize and standardize basic resource data across the Western Oregon Districts. The GIS has now become a day-to-day tool in resource management that allows BLM to display and analyze complex resource issues in a fast and efficient manner. BLM is now actively updating and enhancing resource data as conditions change and additional field information is gathered. The GIS plays a fundamental role in ecosystem management that allows us to track constantly changing conditions, analyze complex resource relationships, and take an organized approach for managing data.

CADASTRAL SURVEY

1. The Cadastral Survey Crew completed 6 surveying projects with a total of 20 miles of resurvey. Fourteen (14) brass cap monuments were established and a total of 13 miles of Federal boundaries were marked. These surveys were completed for the purposes of Forestry or Lands and Realty.

2. Geographic Positions Systems (GPS) technology was provided in support of the following work groups: Botany and Biology for mapping Wildlife and Botany sites, assisting the Roads Inventory and Sediment Project, and Updated Coordinate Values for Helispot. Two GPS training sessions were conducted by a Land Surveyor for approximately 20 District employees.

3. The Geographic Coordinate Data Base (GCDB) project completed 6 townships. Each township was abstracted for survey data and adjusted for final coordinates to serve as the Public Land Survey layer for GIS.

Other accomplishments by Cadastral Survey included resolving Water Rights issues, providing technical support for the Land Line Inventory for GIS, and administering the land survey contract for the survey of land acquisitions for the West Eugene Wetlands program. Also, approximately 25inquiries for surveying information from private land surveyors and local land-owners were answered.

LAW ENFORCEMENT

The Eugene District has two full-time Law Enforcement Rangers, the District Ranger and the Coast Range Resource Area Ranger. The Eugene District had a Law Enforcement Agreement(LEA) with the Lane County Sheriff's Office for a deputy to work halftime on the public lands. The District works cooperatively with other agencies such as the Oregon State Police, Eugene City Police Department, Federal Protective Service, U.S. Forest Service, FBI, INET(Interagency Narcotics Enforcement Team), and the Douglas, Lane and Linn County Sheriff's Offices who provide law enforcement services to BLM. The District receives investigative assistance and support from BLM Special Agents who work in the state office.

Law enforcement efforts on the District focus on patrol, investigating criminal activities, and physical security to provide for employee and public safety and to protect natural resources and property. Incidents and violations have involved timber theft, wildlife poaching, marijuana cultivation, methamphetamine labs, trash dumping, recreation, illegal occupancy, abandoned vehicles, timber protests, specials forest products, and fisheries.

Law enforcement efforts have included educating the public, issuing verbal warnings and citations and making arrests. Law enforcement works closely with and coordinates their activities with BLM employees in all disciplines.

Law enforcement handled about 247 incidents in FY97, 290 incidents in FY98 and 346 incidents in FY99. Law enforcement activity is expected to increase as the population of Lane County continues to grow. Due to budget constraints, the LEA with Lane County was not renewed for fiscal year 2000.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

Analysis & Documentation

The National Environmental Policy Act (NEPA) is the broadest environmental law in the nation. NEPA applies to all federal agencies and most of the activities they manage, regulate, or fund that may affect the quality of the human environment. Whenever a management action is proposed on the BLM administered lands in the Eugene District, BLM is required to conduct an interdisciplinary review of the environmental effects of the proposal. The agency is also required to provide the public with an opportunity to be involved in the planning and decision making process. The review of the environmental effects of a proposed action can occur in any assessments or environmental impact statements.

Categorical Exclusions - It has been determined that some types of proposed activities do not individually or cumulatively have significant environmental effects and may be exempt from requirements to prepare an environmental analysis. These actions are called Categorical Exclusions (CX) and are covered specifically by Department of the Interior and BLM Guidelines.

Environmental Assessments (EA) are prepared to assess the effects of actions that are notexempt from NEPA, are not categorically excluded, and are not covered by an existing environmental document. An EA is prepared to determine if a proposed action or alternative will significantly affect the quality of the human environment (significance is defined in 40 CFR 1508.27). If the impacts are determined to be insignificant, a Finding of No Significant Impacts (FONSI) is prepared that briefly states the reasons the proposed action and/or alternatives will not have a significant effect on the human environment. Once the FONSI has been prepared, the resource manager considers the environmental, social, and economic impacts that would result if the proposed action or an alternative were implemented, and makes a decision as to whether or not to allow the action to take place. If impacts are determined to be significant, the project could be dropped or an Environmental Impact Statement (EIS) could be prepared.

How the Public Can Be Involved- Resource management in the BLM Eugene District and other government agencies is process oriented. To influence a final decision on a project or activity, the public must be a part of the process, and the sooner the better. The public can provide views and concerns as the proposed action and alternatives are being developed. They can also comment on the FONSI for EAs or the Record of Decision for an EIS during the formal comment periods. This information and the time frame for individual projects are published in the Eugene District's *Planning & Environmental Analysis* and is included on the Internet at www.edo.or.blm.gov .

As BLM begins to distribute and collect environmental information about projects being considered, Scoping Notices are sent to a mailing list of interested citizens and adjacent landowners, and are on-line for all to see and to respond. Comments may be sent to the BLM Eugene District by e-mail at or090mb@or.blm.gov. BLM will keep the public informed by displaying the EA (with maps and appendices) and the FONSI for public comment. After considering the comments, BLM will display the final decision on the project. Paper copies of these documents are available by mail upon request with your mailing address to BLM - Eugene District Office, P. O. Box 10226 (2890 Chad Drive, 97408-7336), Eugene, Oregon 97440-2226.

MONITORING

Eugene District Implementation Monitoring

Implementation monitoring was based on a process developed by the Eugene District Ecosystem CORE Team, a group of senior resource specialists. The original basis was Appendix D of the ROD/RMP, but questions from the interagency monitoring effort were also incorporated or used to clarify issues of concern. The district monitoring team consists of the District Ecosystem CORE Team members. The monitoring team assembles all the projects completed for each fiscal year. All projects that had a Categorical Exclusion (CE) or Environmental Assessment (EA) were included in the pool to be sampled. The CE or EA were considered the "action" that varied in size from small localized projects to silvicultural contracts spanning the entire District. A monitoring question package derived from Appendix D of the Eugene RMP was prepared for the District.

Five categories were established to stratify projects into similar types for sampling to ensure that a variety of project types were included, and that some of all types of projects were monitored. The categories were (1) timber sales, (2) silvicultural projects, (3) roads and construction, (4) habitat restoration, and (5) other. A 20 percent random sample was selected from each category. Projects sampled for fiscal years 1996, 1997, 1998, and 1999 are shown in the following table.

The Eugene District is separated into 3 Resource Areas - Coast Range, McKenzie, and South Valley. The Resource Area staffs prepared answers to the monitoring questions for the individual actions based on a review of the files and NEPA documentation. A monitoring team consisting of members of the District Ecosystem Core Team reviewed individual project monitoring packages.

Each year, some projects selected for monitoring had not been completed. For the purposes of monitoring, "completed" is defined as all ground disturbing work done for projects other than timber sales. For timber sales, "completed" is defined as yarding of the timber has been completed. Site preparation is not included but may be reexamined if deemed necessary at the time it is completed.

Only completed projects were monitored. If a project was not completed at the time it was selected for monitoring, it was carried over to the next monitoring period or when it was completed. The table below shows those carryover projects that are yet to be completed. The table does not show those projects that were originally carried over to another fiscal year, but for which the monitoring has now been completed. **Appendix C** has the results of the 1999 Project Level monitoring, while **Appendix B** has the results of the Program Level monitoring which is completed by the staff specialists on the Eugene District.

Province Level Implementation Monitoring

Two separate teams, one to monitor the Willamette Province and one to monitor the Coast Range Province, were selected to complete the second year Province level implementation monitoring. There were federal agency representatives and community members on the team. The teams addressed 114 revised and improved questions on randomly selected timber sales (greater than 1 million board feet), roads associated with those timber sales and a pilot effort to monitor landscape scale activities. Specific results can be seen in the report titled, "Results of the FY 1999 Implementation Monitoring Program", which should be available from REO later this year, or, individual reports may be reviewed at the Eugene district office.

Effectiveness Monitoring

Effectiveness monitoring is a longer range program than implementation monitoring, and time must pass to measure many of the factors of concern. Forest Plan effectiveness monitoring will be done at the regional or province scale. Effectiveness monitoring of the Eugene RMP will incorporate these regional and province findings and may also conduct specific effectiveness monitoring as well. The overall strategy, logic and design of the effectiveness monitoring program for the Northwest Forest Plan was discussed in the general technical report number PNW-GTR-437, January 1999. This report provides the scientific basis for the effectiveness monitoring program and discusses specific modules for monitoring priority resources. These modules and priority resources are (1) late-successional and old growth forest, (2) northern spotted owl, (3) marbled murrelet, and (4) aquatic-riparian ecosystems. Effectiveness monitoring modules for the first three priority resources have been published and the aquatic-riparian module is scheduled to be finalized later this year.

Modules for monitoring other Forest Plan priority species and topic areas such as (1) survey and manage species, (2) socioeconomic, and (3) tribal issues will be developed.

Table 47 - EAs Per Category for FY 1996 thru 1999

Timber Sales	43
Recreation	8
Restoration	21
Roads including flood repairs	15
Fertilization	2
EAs Protested	16
EAs Appealed	9

Table 48 - Sampled Projects, Fiscal Years 1996, 1997, 1998, 1999 - Eugene District

	FY96	FY97	FY98	FY99
Timber Sales	--Petzold Road --Battle East --River Grub --Bear Alder --Woody Hayes --Camas Connection --Wendling	–Hazard Trees --McKenzie Blowdown Trees --Gowdyville Density Mgmt. –Tucker Creek 2 --Upper Wolf	--Torched Mill --Alma Over Density Mgmt. --Goodpasture	–Pataha
Silvicultural Projects	--Tree Planting --McKenzie RA* --Manual Release, CE #96-09	--South Valley PCT –Coast Range PCT	–South Valley Manual Maintenance & PCT	– McKenzie PCT
Roads and Construction	--High Road Restoration --ERFO Road Repair --Blagen Road --McGowan Creek Rd. Restoration --County Line Rd. Decommission.	--Eagle Rest/High Road Repair --Horn Butte Road --Owl Creek Road Repair --Hale Road Use Permit	--Road No. 22-3-18 Storm Damage Repair --WEYCO Culvert Replacement --Silver Creek CXT Installaton	–Millers Head R/W
Habitat Restoration	--Whittaker Creek Aquatic Habitat Improvement Project	--McKenzie Snag Creation --Native Seeding in the AMA	--McKenzie Snag Creation	–Snag Creation
Other	--Lake Creek Fish Ladder Repair --Silver Creek Boat Landing --McKenzie RA Blowdown --Danger Trees, McKenzie RA --U of W Seismic Site	--South Valley Roadside Blowdown --Lower Lake Creek Falls Parking Lot Restoration	--Nelson Ridge Quarry Permit	

Table 49 - Carryover Projects, Fiscal Years 1996, 1997, 1998, 1999

	FY 1996	FY 1997	FY 1998	FY99
Timber Sales		--Gowdyville Density Mgmt. --Tucker Creek 2 --Upper Wolf	--Torched Mill --Alma Over Density Mgmt. --Goodpasture	–Alma Over
Silvicultural Projects	None	None	None	
Roads and Construction	None	None	None	– ODF R/W – Clay creek footbridge
Habitat Restoration	--Whittaker Creek Aquatic Habitat Restoration	None	None	
Other	None	None	None	

PICTURE 4

GLOSSARY

Adaptive Management Areas - Landscape units designated for development and testing of technical and social approaches to achieving desired ecological, economic, and other social objectives.

Allowable Sale Quantity (ASO) - The gross amount of timber volume, including salvage, that may be sold annually from a specified area over a stated period of time in accordance with the management plan. Formerly referred to as allowable cut."

Anadromous Fish - Fish that are born and reared in freshwater, move to the ocean to grow and mature, and return to freshwater to reproduce. Salmon, steelhead, and shad are examples.

Archaeological Site - A geographic locale that contains the material remains of prehistoric and/or historic human activity.

Area of Critical Environmental Concern (ACEC) - An area of BLM administered lands where special management attention is needed to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources, or other natural systems or processes; or to protect life and provide safety from natural hazards.

Best Management Practices (BMP) - Methods, measures, or practices designed to prevent or reduce water pollution. Not limited to structural and nonstructural controls and procedures for operations and maintenance. Usually, BMPs are applied as a system of practices rather than a single practice.

Biological Diversity - The variety of life and its processes, including a complexity of species, communities, gene pools, and ecological function.

Candidate Species - Those plants and animals included in Federal Register "Notices of Review" that are being considered by the Fish and Wildlife Service (FWS) for listing as threatened or endangered. There are 2 categories that are of primary concern to BLM. These are:

> **Category 1.** Taxa for which the FWS has substantial information on hand to support proposing the species for listing as threatened or endangered. Listing proposals are either being prepared or have been delayed by higher priority listing work.
>
> **Category 2.** Taxa for which the FWS has information to indicate that listing is possibly appropriate. Additional information is being collected.

Cavity Nesters - Wildlife species, most frequently birds, that require cavities (holes) in trees for nesting and reproduction.

Commercial Thinning - The removal of merchantable trees from an even-aged stand to encourage growth of the remaining trees.

Cubic Foot - A unit of solid wood, one foot square and one foot thick.

Cumulative Effect - The impact that results from identified actions when they are added to other past, present, and reasonably foreseeable future actions regardless of who undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Density Management - Cutting of trees for the primary purpose of widening their spacing so that growth of remaining trees can be accelerated. Density management harvest can also be used to improve forest health, to open the forest canopy, or to accelerate the attainment of old growth characteristics, if maintenance or restoration of biological diversity is the objective.

District Designated Reserves (DDR) - Areas designated for the protection of specific resources, flora and fauna, and other values. These areas are not included in other land use allocations nor in the calculation of the PSQ.

Eligible River - A river or river segment found, through interdisciplinary team and, in some cases interagency review, to meet Wild and Scenic River Act criteria of being free flowing and possessing one or more Outstandingly Remarkable Values.

Endangered Species - Any species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register.

Environmental Assessment (EA) - A systematic analysis of site-specific BLM activities used to determine whether such activities have a significant effect on the quality of the human environment; and whether a formal Environmental Impact Statement is required; and to aid an agency's compliance with NEPA when no EIS is necessary.

General Forest Management Area (GFMA) - Forest land managed on a regeneration harvest cycle of 60-110 years. A biological legacy of 6 to 8 green trees per acre would be retained to assure forest health. Commercial thinning would be applied where practicable and where research indicates there would be gains in timber production.

Hazardous Materials - Anything that poses a substantive present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Land Use Allocations - Allocations that define allowable uses/activities, restricted uses/ activities, and prohibited uses/ activities. They may be expressed in terms of area such as acres or miles, etc. Each allocation is associated with a specific management objective.

Late-Successional Forests - Forest seral stages that include mature and old growth age classes.

Matrix Lands - Federal land outside of reserves and special management areas that will be available for timber harvest at varying levels.

Noxious Plant/Weed - A plant specified by law as being especially undesirable, troublesome, and difficult to control.

O&C Lands - Public lands granted to the Oregon and California Railroad Company, and subsequently revested to the United States, that are managed by the Bureau of Land Managementunder the authority of the O&C Lands Act.

Off-Highway Vehicle (OHV) - Any motorized track or wheeled vehicle designed for cross-country travel over natural terrain. The term, "Off Highway Vehicle" will be used in place of the term "Off Road Vehicle" to comply with the purposes of Executive Orders 11644 and 11989. The definition for both terms is the same.

> **Open:** Designated areas and trails where Off Highway Vehicles may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.
>
> **Limited:** Designated areas and trails where Off Highway Vehicles are subject to restrictions limiting the number or types of vehicles, date, and time of use; limited to existing or designated roads and trails.
>
> **Closed:** Areas and trails where the use of Off Highway Vehicles is permanently or temporarily prohibited. Emergency use is allowed.

Outstanding Natural Area (ONA) - An area that contains unusual natural characteristics and is managed primarily for educational and recreational purposes.

Outstandingly Remarkable Values (ORV) - Values among those listed in Section 1 (b) of the Wild and Scenic Rivers Act: "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values . . ." Other similar values that may be considered include ecological, biological or botanical, paleontological, hydrological, scientific, or research.

Precommmercial Thinning - The practice of removing some of the trees less than merchantable size from a stand so that remaining trees will grow faster.

Prescribed Fire - A fire burning under specified conditions that will accomplish certain planned objectives.

Probable Sale Quantity (PSQ) - Probable Sale Quantity estimates the allowable harvest levels for the various alternatives

that could be maintained without decline over the long-term if the schedule of harvests and regeneration were followed. "Allowable" was changed to "probable" to reflect uncertainty in the calculations for some alternatives. Probable Sale Quantity (PSQ) is otherwise comparable to Allowable Sale Quantity (ASQ). However, Probable Sale Quantity does not reflect a commitment to a specific cut level. Probable Sale Quantity includes only scheduled or regulated yields and does not include "other wood" or volume of cull and other products that are not normally part of Allowable Sale Quantity calculations.

Regeneration Harvest - Timber harvest conducted with the partial objective of opening a forest stand to the point where favored tree species will be reestablished.

Regional Ecosystem Office (REO) - The main function of this office is to provide staff work and support to the Regional Interagency Executive Committee (RIEC) so the standards and guidelines in the forest management plan can be successfully implemented.

Regional Interagency Executive Committee (RIEC) - This group serves as the senior regional entity to assure the prompt, coordinated, and successful implementation of the forest management plan standards and guidelines at the regional level.

Research Natural Area (RNA) - An area that contains natural resource values of scientific interest and is managed primarily for research and educational purposes.

Resource Management Plan (RMP) - A land use plan prepared by the BLM under currentregulations in accordance with the Federal Land Policy and Management Act.

Right-of-Way - A permit or an easement that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, reservoirs, and the lands covered by such an easement or permit.

Rural Interface Areas - Areas where BLM administered lands are adjacent to or intermingled with privately owned lands zoned for 1 to 20-acre lots or that already have residential development.

Seral Stages - The series of relatively transitory plant communities that develop during ecological succession from bare ground to the climax stage. There are five stages:

> **Early Seral Stage -** The period from disturbance to crown closure of conifer stands usually occurring from 0-15 years. Grass, herbs, or brush are plentiful.
>
> **Mid Seral Stage -** The period in the life of a forest stand from crown closure to ages 15-40. Due to stand density, brush, grass, or herbs rapidly decrease in the stand. Hiding cover may be present.
>
> **Late Seral Stage -** The period in the life of a forest stand from first merchantability to culmination of Mean Annual Increment. This is under a regime including commercial thinning, or to 100 years of age, depending on wildlife habitat needs. During this period, stand diversity is minimal, except that conifer mortality rates will be fairly rapid. Hiding and thermal cover may be present. Forage is minimal.
>
> **Mature Seral Stage -** The period in the life of a forest stand from Culmination of Mean Annual Increment to an old growth stage or to 200 years. This is a time of gradually increasing stand diversity. Hiding cover, thermal cover, and some forage may be present.

Old Growth - This stage constitutes the potential plant community capable of existing on a site given the frequency of natural disturbance events. For forest communities, this stage exists from approximately age 200 until when stand replacement occurs and secondary succession begins again. Depending on fire frequency and intensity, old growth forests may have different structures, species composition, and age distributions. In forests with longer periods between natural disturbance, the forest structure will be more even-aged at late mature or early old growth stages.

Short-Term - The period of time during which the RMP will be implemented; assumed to be 10 years.

Silvicultural Prescription -A professional plan for controlling the establishment, composition, constitution, and growth of forests.

Site Preparation - Any action taken in conjunction with a reforestation effort (natural or artificial) to create an environment that is favorable for survival of suitable trees during the first growing season. This environment can be created by altering

ground cover, soil or microsite conditions, using biological, mechanical, or manual clearing, prescribed burns, herbicides or a combination of methods.

Visual Resource Management (VRM) - The inventory and planning actions to identify visual values and establish objectives for managing those values and the management actions to achieve visual management objectives.

Wild and Scenic River System - A National system of rivers or river segments that have been designated by Congress and the President as part of the National Wild and Scenic Rivers System (Public Law 90-542, 1968). Each designated river is classified as one of the following:

Wild River -A river or section of a river free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. Designated wild as part of the National Wild and Scenic Rivers System.

Scenic River -A river or section of a river free of impoundments, with shorelines or watersheds still largely primitive and undeveloped but accessible in places by roads. Designated scenic as part of the National Wild and Scenic Rivers System.

Recreational River - A river or section of a river readily accessible by road or railroad, that may have some development along its shorelines, and that may have undergone some impoundment of diversion in the past. Designated recreational as part of the National Wild and Scenic Rivers System.

Acronyms/Abbreviations

ACEC	Area of Critical Environmental Concern
ACS	Aquatic Conservation Strategy
APS	Annual Program Summary
BLM	Bureau of Land Management
CBWR	Coos Bay Wagon Road
C/DB	Connectivity/Diversity Blocks
CERTs	Community Economic Revitalization Teams
CT	Commercial Thinning
CX	Categorical Exclusions
CWA	Clean Water Act
CWD	Coarse woody debris
CX	Categorical Exclusions
DM	Density Management
EA	Environmental Analysis
EIS	Environmental Impact Statement
ERFO	Emergency Relief Federally Owned
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FEIS	Final Environmental Impact Statement
FH	Final Harvest
FONSI	Finding of No Significant Impacts
FY	Fiscal Year
GFMA	General Forest Management Area
GIS	Geographic Information System
IDT	Interdisciplinary Teams
LSR	Late-Successional Reserve
LUA	Land Use Allocation
MMBF	Million board feet
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NFP	Northwest Forest Plan
NMFS	National Marine Fisheries Service
OCEAN	Oregon Coastal Environment Awareness Network
O&C	Oregon and California Revested Lands
ODFW	Oregon Department of Fish and Wildlife
PACs	Province Advisory Councils
PL	Public Law
POC	Port-Orford Cedar
PSQ	Probable Sale Quantity
REO	Regional Ecosystem Office
RIEC	Regional Interagency Executive Committee
RMP	Resource Management Plan
RMP/ROD	The *Eugene District ResourceManagement Plan* and *Record of Decision*
ROD	Record of Decision
RR	Riparian Reserve
R/W	Right-of-Way
SEIS	Supplemental Environmental Impact Statement
S&G	Standards and Guidelines
S&M	Survey and Manage
TMO	Timber Management Objective(s)
USFS	U.S. Forest Service

USFWS U.S. Fish and Wildlife Service

APPENDIX A

SUMMARY OF PLAN MAINTENANCE ACTIONS SINCE 1995

The Eugene Resource Management Plan Record of Decision was approved in May 1995. Since that time, Eugene has begun implementation of the plan across the entire spectrum of resources and land use allocations. As the plan is implemented it sometimes becomes necessary to make minor changes, refinements, or clarifications of the plan. Potential minor changes, refinements, or clarifications in the plan may take the form of maintenance actions. Maintenance actions respond to minor data changes and incorporation of activity plans. This maintenance is limited to further refining or documenting a previously approved decision incorporated in the plan. Plan maintenance will not result in expansion of the scope of resource uses or restriction or change the terms, conditions, and decisions of the approved Resource Management Plan. Maintenance actions are not considered a plan amendment and do not require the formal public involvement and interagency coordination process undertaken for plan amendments.

Important plan maintenance will be documented in the Eugene District Annual Program Summary. Example of possible plan maintenance issues that would involve clarification may include the level of accuracy of measurements needed to establish Riparian Reserve widths, measurement of coarse woody debris, etc. Much of this type of clarification or refinement involves issues that have been examined by the Regional Ecosystem Office (REO) and contained in subsequent instruction memos from the BLM Oregon State Office. Depending on the issue, not all plan maintenance will necessarily be reviewed and coordinated with the Regional Ecosystem Office or

Provincial Advisory Committee. Plan maintenance is also described in the Eugene District Resource Management Plan Record of Decision, page 109.

Summaries of Plan Maintenance
June 1995 thru September 1998

1996

Oregon State Office Guidance

1. Memo directing changes in surveys for arthropods 11/8/96 - BLM IB-OR-97-045
2. Memo implementing REO memo on management of lynx 6/28/96 - BLM IM-OR-96-97
3. Memo on protocols for S&M amphibians 3/19/96 - BLM IB-OR-96-006
4. Memo on dwarf mistletoe 8/15/96 - BLM IB-OR-95-443
5. Memo on plan maintenance 7/5/96 - OR IB-OR-96-294
6. Memo on implementing CWD S&G 11/19/96 - BLM IB-OR-96-064

Clarification Originating at the Eugene BLM District - The guidance shown below is in a draft or interim stage. These interim drafts have not been formally approved and completed as plan maintenance.

1. Snag recruitment in the Matrix (in progress)
2. Hardwood retention in harvest areas
3. Maximum harvest area size
4. Management of riparian features when they do not clearly meet the definitions of Riparian Reserves as stated in the ROD
5. Reserves surrounding wetlands of less than 1 acre
6. Yarding corridorsthrough Riparian Reserves
7. Criteria to be applied in determination of regeneration or intermediate harvest

8. Silvicultural treatments to enhance Connectivity Blocks

1997

The Eugene District continually works on maintenance of the Eugene District Resource Management Plan. The following refinements and clarifications to the Resource Management Plan have been completed.

- Area control rotation of connectivity blocks - dated 6/23/97 - Permits greater flexibility in amounts of harvest from connectivity blocks to better achieve objectives of connectivity blocks.
- Clarification of purpose of connectivity/diversity blocks in the South Valley Resource Area dated 7/18/97.
- Perpendicular yarding across stream channels dated 9/2/97 allows yarding angles to streams to be between 45 and 90 degrees.

MEMORANDUM REFERENCE	SUBJECT SUMMARY OR DESCRIPTION
REO Memorandum dated 4/7/95	• Clarifies access for key watersheds, how to meet S&G for no net increases in roads where third parties have access rights.
REO Memorandum dated	• Memo exempting certain Silvicultural activities from LSR assessment requirements. Interagency Memorandum dated 7/5/95
BLM IM OR-95-123	• Memo clarifying when watershed analysis is and is not required for minor activities in Riparian Reserves.
REO Memorandum dated 7/24/95	• Memo changing status of dwarf mistletoe in Table C-3 of the ROD.
REO Memorandum dated 12/15/95	• Memo clarifying adaptive management process
REO Memorandum dated 12/15/95	• Memo clarifying REO review of LSR assessments
REO Memorandum dated 4/26/96	• Additional guidance on LSR assessment reviews
REO Memorandum dated 9/6/96	• Draft memo limiting surveys for certain arthropods to southern range.
REO Memorandum dated 6/11/96	• Memo changing provisions regarding the management of the lynx.
REO Memorandum dated 7/9/96	• Memo exempting certain commercial thinning projects in LSRs and MLSAs from REO review.
REO Memorandum dated 9/30/96	• Memo amending commercial thinning exemption in LSRs.
Interagency Memorandum dated 11/1/96 BLM IM-OR-97-007	• Interagency Memo clarifying the implementation of S&M component 2 species; contains definitions of S&G terms such as “ground disturbing” and “implemented.”
REO Memorandum dated 2/27/97	• Memo clarifying requirement by REO to review AMA plans.
REO Memorandum dated 3/22/95	• Memo reviewing BLM site potential tree height determination.
REO Memorandum dated 10/13/94	• Memo reviewing BLM’s interpretation of Coarse Woody Debris requirements.
REO Memorandum dated	• Removal of *Buxbazlmia p*. From S&M list.

REO Memorandum dated 8/31/95

- Memo on LSR boundary adjustments.

1998

Clarification when a project is implemented in context of component 2 Survey and Manage.
S&G C-5 of NFP ROD and Management Action/Direction 2.c., page 22 of the RMP ROD states that "surveys must precede the design of activities that will be implemented in [FY] 1997 or later". The interagency interpretation is that the "NEPA decision equals implemented" in context of component 2 species survey requirements. Projects with NEPA decisions to be signed before June 1, 1997 have transition rules that are described in IM OR-97-007 (Information from Oregon State Office Instruction Memorandum OR-97-007).

Conversion to Cubic Measurement System.
Beginning in fiscal year 1998 (October 1997 sales), all timber sales (negotiated and advertised) will be measured and sold based upon cubic measurement rules. All timber sales will be sold based upon volume of hundred cubic feet (CCF). The Eugene District RMP/ROD declared an allowable harvest level of 6.1 million cubic feet. Information is from Oregon State Office Instruction Memorandum OR-97-045.

Oregon Public Lands Transfer and Protection Act of 1998.
Requirements affecting the District are a policy of no-net-loss of O&C or Public Domain Land in carrying out sales, purchases, and exchanges in the geographic area which includes the Eugene District. This legislation is adopted as part of the RMP decision.

1999

No Plan maintenance activities to report.

APPENDIX B

MONITORING REPORT - Program Level

1. SEIS Special Attention Species (S&M, Protection Buffer SP)

S&M #4 - Are the habitats for amphibians, mammals, bryophytes, mollusks, vascular plants, fungi, lichens, and species listed in Appendix B being surveyed as directed in the SEIS/ROD? *Refers to Survey and Manage #3 species*

YES __X__ NO N/A

S&M #5 - Are high priority sites for species management being identified (refers to Survey and Manage Strategy 3 Species)? *Information on high priority sites for species management will be generated from Extensive Surveys implemented by the REO and may/may not be applicable to this District depending on survey results.*

YES NO N/A __X__

S&M #6 - Are general regional surveys (Survey and Manage Strategy 4 Species) being conducted to acquire additional information and to determine necessary levels of protection for arthropods and fungi species that were not classed as rare and endemic, bryophytes, and lichens? *Protection levels for Survey and Manage Component 4 Species will be identified during General Regional Surveys that will be implemented by the REO. Protection levels for these species may/may not be applicable to this District depending on survey results. This is currently a regional effort and no high priority sites for species management have been identified on the Eugene District.*

YES NO N/A __X__

2. Special Status Species

SSS #2 - Are the actions identified in plans to recover Special Status Species being implemented in a timely manner?

YES __X__ NO N/A

Which actions were implemented; which (if any) were not?

Bald Eagle - The Eugene District completed the McKenzie Resource Area Bald Eagle Habitat Management Plan for the management of designated bald eagle habitat areas. The District began implementing this plan by incorporating road decommissioning recommendations from the plan into timber sale plans.

Bradshaw's *Lomatium* - Population monitoring for Bradshaw's *lomatium* occurred in 1999 at two

sites within the West Eugene Wetlands Project Area. Youth crews worked on a habitat management project at one site to control the sprouting of woody plants from the prairie.

Kinkaid's Lupine - Population monitoring for the Kinkaid's lupine occurred in 1999 at two sites within the West Eugene Wetlands Project Area. These data will now serve as baseline for determining the effects of future habitat enhancement treatments at the sites. Youth crews worked on a habitat management project at one site to control/remove blackberry encroachment.

Williamette Daisy - Population monitoring for the Williamette daisy occurred in 1999 at two sites within the West Eugene Wetlands. These data will now serve as baseline for determining the effects of future habitat enhancement treatments at the site. Youth crews worked on a habitat management project at one site to remove Oregon ash trees from the prairie.

Experimental introductions of several Special Status Plant Species are also being implemented as well as a transplant project in coordination with the City of Eugene, Oregon Department of Agriculture, and U. S. Fish and Wildlife Service within the West Eugene Project Area.

SSS #3 - What coordination with other agencies has occurred in the management of Special Status Species? Identify agency and coordination efforts.

In cooperation with the Nature Conservancy and the National Center for Ecological Analysis and Synthesis, the Eugene District continued to evaluate and improve techniques for protection and reestablishment of native plant communities relied upon by the Fender's blue butterfly. The Eugene District assisted the NCASI Adaptive Management of the Northern Spotted Owl study that monitored 30,000 acres of habitat. District staff monitored 8,000 acres of owl habitat in cooperation with private timber companies and consultants.

The Eugene District participated in a five-year Challenge Cost Share with Oregon State University, Weyerhaeuser, the U.S. Fish and Wildlife Service, and the Oregon Department of Fish and Wildlife to identify local bat species and examine bat roost strata availability and use. This study found 137 bat roosts through radio telemetry on 51 bats and started to evaluate 95,000 acres of habitat.

Through the Challenge Cost Share Program, and in conjunction with Avifauna Northwest, the BLM Salem District, and Willamette Industries, the Eugene District monitored the use of regenerated forest stands by the willow flycatcher in the Coast Range.

The Eugene District has also coordinated with the Oregon Department of Agriculture, U.S. Fish and Wildlife Service, multiple U.S. Forest Service administrative units, Oregon State University, City of Eugene, and other specialists interested in managing federally listed plant species in the West Eugene Wetlands Project Area and other Special Status Plant species throughout the District.

SSS #4 - What land acquisitions occurred or are underway to facilitate the management and recovery of Special Status Species? How many acres were or will be acquired, and which species will benefit?

Seventy two acres of conservation easements and/or sites acquired occurred in the West Eugene

Project area to benefit rare Willamette Valley plant and animal species. Proposals for an additional 602 acres of acquisition/easements are planned for FY 2000.

SSS #5 - What site specific plans for the recovery of Special Status Species were orare being developed?

The Eugene District completed the McKenzie Resource Area Bald Eagle Habitat Management Plan for the management of designated bald eagle habitat areas.

The U.S. Fish and Wildlife Service is currently working on a Willamette Valley Recovery Plan that addresses Threatened and Endangered plant and animal species occurring in the West Eugene Wetlands Project area.

SSS #6 - What type of analysis is being implemented that ascertains species requirements or enhances the recovery or survival of a species?

Rare plant monitoring on all Threatened and Endangered species and habitat management treatments to benefit these species.

SSS #7 - What is the status of on-the-ground efforts to maintain or restore the community structure, species composition, and ecological processes of Special Status plant and animal habitat?

The District participated in the formation of an interagency oak working group to address the decline of oak woodlands in Oregon, Washington, and California. The Eugene District created 290 snags on 325 acres of regeneration harvest units. The District created approximately 2,000 snags on 1,400 acres within the Matrix land use allocation in Mohawk/McGowan and Lost Creek watersheds. The Eugene District treated young stands (30 years and younger) to change their development trajectory from tree plantations to future late-successional forest. The District completed density reduction (similar to precommercial thinning) on 150 acres, individual tree release treatments (1,103 plots) on 293 acres, and small gap creation (597 plots) on 201 acres.

3. Special Areas

SA #2 - What is the status of the preparation, revision, and implementation of ACEC management plans?

Management plans were not to be prepared or revised in FY99. Plan implementation has focused on Defensibility Monitoring to assure that any inappropriate actions occurring in these areas are identified in time to prevent site degradation. Rare species monitoring has occurred at several sites to track the status of Special Status Plants, and mowing and weed control has occurred on selected sites to aid in restoring native plant composition.

SA #3 - Are interpretive programs and recreation uses being developed and encouraged in ONAs?

YES NO __X__ N/A

Are the outstanding values of the ONAs being protected from damage?

YES __X__ NO N/A

A comprehensive assessment of the relevant and important values was completed for Heceta Dunes ACEC/ONA in FY99 that outlined significant values and their locations within the ACEC/ONA. This information will aid managers in targeting specific actions necessary to prevent site damage from unauthorized uses.

SA #4 - What environmental education and research initiatives and programs are occurring in the RNAs and EEAs?

None in FY 99

Some cone collection has occurred at selected sites to assure adequate ex situ conifer seed gene reserves.

SA #6 - Are actions being identified that are needed to maintain or restore the important values of the Special Areas?

YES __X__ NO N/A

A comprehensive assessment of each area should be done to identify and prioritize actions needed (if any). Defensibility monitoring has been effective in preventing inappropriate actions from occurring within these areas that would degrade important values.

Are the actions being implemented?

YES __X__ NO N/A

Long-term baseline vegetation monitoring is scheduled to be implemented in FY2000 that will aid managers in identifying appropriate management activities needed to maintain ACEC/RNA values.

4. Riparian Reserves (No Program Level Q)

5. Late-Successional Reserves

LSR #1 - What is the status of the preparation of assessment and fire plans for Late-Successional Reserves ?

Late-Successional Reserve assessments have been completed for all mapped Late-Successional Reserves in the Eugene District. The Oregon Coast Province (Southern Portion) Late-Successional Reserve Assessment addresses the portions of LSR RO267 and RO268 in the Coast Range and South Valley Resource Areas of the Eugene District. The South Cascades Late-Successional Reserve Assessment addresses the portions of LSR 222 in the South Valley Resource Area of the

Eugene District. The Regional Ecosystem Office (REO) has reviewed these assessments and found that they provide a sufficient framework and context for projects and activities within the Late-Successional Reserves. For each assessment, the Regional Ecosystem Office acknowledged that many types of future projects that are consistent with the assessment and the Standards and Guidelines in the Northwest Forest Plan are exempted from subsequent project-level review by the Regional Ecosystem Office.

LSR #3 - What is the status of development and implementation of plans to eliminate or control nonnative species that adversely impact late-successional objectives?

Control strategy yet to be developed.

6. Adaptive Management Areas

AMA #1 - Are the AMA plans being developed, and do they establish future desired conditions?

YES _X_ NO N/A

An AMA guide was developed that established guiding principles and themes.

7. Matrix (No Program Level Q)

8. Air Quality (No Program Level Q)

9. Soil and Water

S&W #3 - What is the status of identification of instream flow needs for the maintenance of channel conditions, aquatic habitat, and riparian resources?

BLM has gauging stations and uses USGS gauging stations. Most of the work for identifying in-stream needs has been data gathering. Riparian Reserves identified during timber sale analysis and design maintains options to address the issue at a later date.

S&W #4 - What watershed restoration projects are being developed and implemented?

Big River/Edwards Creek Aquatic Habitat Restoration Project was completed during FY99.

S&W #5 - What fuel treatment and fire suppression strategies have been developed to meet Aquatic Conservation Strategy objectives?

None.

S&W #6 - What is the status of development of road or transportation management plans to meet Aquatic Conservation Strategy objectives?

The Sharps Creek Watershed Analysis and Calapooya watershed analysis (completed in FY99) contains recommendations regarding road management.

S&W #7 - What is the status of preparation of criteria and standards that govern the operation, maintenance, and design for construction and reconstruction of roads?

The Northwest Forest Plan S&Gs and Resource Management Plan Best Management Practices are being applied on a site-specific basis, where appropriate.

Consistent with the Record of Decision, standard road construction engineering guidelines are utilized on a site specific basis.

S&W #8 -

a. What is the status of the reconstruction of roads and associated drainage features identified in watershed analysis as posing a substantial risk?

Selected culverts are being replaced to provide for 100 year event flows and provide fish passage. Roads damaged by floods are being repaired according to the S&Gs of the Northwest Forest Plan, and Environmental analysis is used as appropriate to determine repair design features.

b. What is the status of closure or elimination of roads to further Aquatic Conservation Strategy objectives and to reduce the overall road mileage within Key Watersheds?

A Landscape Plan for the Bear-Marten Key Watershed is in the Planning process and expected to be completed in FY2000.

c. If funding is insufficient to implement road mileage reductions, are construction and authorizations through discretionary permits denied to prevent a net increase in road mileage in Key Watersheds?

YES ____ NO ____ N/A __X

S&W #9 - What is the status of review of ongoing research in Key Watersheds to ensure that significant risk to the watershed does not exist?

Identify: No research or management activity has occurred in the Key Watersheds. A Landscape Design Plan for the BLM portion of the Central Cascades Adaptive Management Area (which encompasses the Bear-Marten Key Watershed) will be completed in FY 2000.

S&W #10 - What is the status of evaluation of recreation, interpretive, and user enhancement activities/facilities to determine their effects on the watershed?

Recreation, interpretive, and user-enhancement activities/facilities within the watershed are evaluated to determine their effects on the watershed on a case-by-case basis as proposals for actions or changes **to** facilities occur using the NEPA compliance process. There is no independent evaluation ongoing for existing facilities. Proposed actions are evaluated for consistency with watershed analysis recommendations in those watersheds having a watershed analysis.

What is the status of eliminating or relocating these activities/facilities when found to be in conflict with Aquatic Conservation Strategy objectives?

No existing facilities have been found to be out of compliance with the Aquatic Conservation Strategy. Proposed activities or facilities are evaluated for consistency with Aquatic Conservation Strategy objectives, and modified, moved, or eliminated if compliance cannot be achieved. Efforts are being made to control or eliminate inconsistent activities, such as unauthorized off-road vehicle use in limited areas, through signing, enforcement, and public education; however, these efforts have not been wholly successful.

S&W #11 - What is the status of cooperation with other agencies in the development of watershed-based Research Management Plans and other cooperative agreements to meet Aquatic Conservation Strategy objectives?

Currently working or cooperating with the following agencies:
- Long Tom Watershed Council, and Siuslaw Watershed Council;
- Siuslaw Soil and Water Conservation District, and the Natural Resource Conservation Service;
- Nursery Technical Coop at Oregon State University (Study of the Effects of Different Levels of fertilization on WRC in Riparian Areas).
- PNW/Cooperative Forest Ecosystem Research (CFER) working on the Middle McKenzie Landscape Design.
- Watershed Cumulative Effects Research Coop-Links with Rocky Mountain Research Station (USFS) and the National Council for Air and Stream Improvement (NCASI), UC Berkeley, UC Davis, and PNW.
- Agreement with the Rocky Mountain Research Station (USFS) - Road Sediment Research Study. We have agreements with Willamette Industries, Weyerhaeuser, and Roseburg Resources to gather data for this study on their lands.
- Western Oregon Density Management Study - (Ten High Density Management Study Area).
- Formal and informal communications with other agencies: USFW, ODFW, NMFS, and University of Washington Stand Management Cooperative.
- McKenzie Watershed Council, Mohawk Watershed Partnership, Middle Fork Watershed Council, and Lost Creek Watershed Group.

What is the status of cooperation with other agencies to identify and eliminate wild ungulate impacts that are inconsistent with attainment of Aquatic Conservation Strategy objectives?

No impacts of concern have been identified to date. In general, silvicultural practices include tubing of new seedlings planted in Riparian Reserves or other areas where wild ungulate damage may be expected.

10. Wildlife Habitat

WH #3 - What is the status of designing and implementing wildlife restoration projects?

WH #4 - What is the status of designing and constructing wildlife interpretive and other user-enhancement facilities?

11. Fish Habitat (No Program Level Q)

12. Cultural Resources(no Program Level Q)

CR #3 - What efforts are being made to work with Native American Indian groups to accomplish cultural resource objectives and achieve goals outlined in existing memoranda of understanding and develop additional memoranda as needs arise?

CR #4 - What public education and interpretive programs were developed to promote the appreciation of cultural resources?

13. Visual Resources

VR#1 - Are visual resource design features and mitigation methods being followed during timber sales and other substantial actions in Class ii and iii areas?

Yes. Visual Resource management design and mitigation methods are being followed for all timber sales and other substantial actions in areas with VRM Class II and III management prescriptions. One timber sale design in a VRM class IV area was modified to reduce visual impacts to a popular recreation area

Where timber sales fall in VRM Class III areas, at least 12-18 trees per acre are retained. This practice usually reduces the visual impacts of timber harvest in most circumstances. No timber harvest has occurred in VRM Class II areas.

14. Wild and Scenic Rivers

WSR#1 - Are BLM actions and BLM authorized actions consistent with protection of the ORVs designated suitable and eligible, but not studied, rivers?

All BLM actions on designated Suitable and Eligible have been consistent with protection of the river segment's Outstandingly Remarkable Values**.**

WSR#2 - Are existing plans being revised to conform to Aquatic Conservation Strategy Objectives? Are revised plans being implemented?

There are no formal plans developed at this time for Eugene District BLM eligible rivers.

15. Rural Interface Areas

RIF #1 - Are design features and mitigation measures developed and implemented to avoid/ minimize impacts to health, life, property, and quality of life and to minimize the possibility of conflicts between private and Federal land management?

No activity in RIF for Eugene District in FY 99.

16. Socioeconomic Conditions

SC#1 - What innovative strategies and programs have been developed through coordination with State and local governments to support local economies and enhance local communities?

South Valley Resource Area continues to implement the Memorandum of Understanding signed in 1994 with seven agencies and organizations for the management of the Row River Trail. Cooperation with the City of Cottage Grove regarding city-owned portions of the trailis on-going.

SC#2 - Are RMP implementation strategies being identified that support local economies?

Yes, refer to JITW contracts located in the Budget section.

SC#3 - What is the status of planning and developing amenities that enhance local communities - *Includes recreation and wildlife viewing facilities*

Completed design and construction of the Mosby Trailhead for the Row River Trail.

17. Recreation

RN#2 - What is the status of development and implementation of Recreation Area Management Plans (RAMP)?
Insert table 50

Table 50 - Recreation Area Management Plans

Special Recreation Management Area Name	Size in Acres (Approx)	Status of RAMP
Siuslaw River	9,529	None/not planned
Lower Lake Creek	2,090	completed FY 1998
Upper Lake Creek	10,515	Initiated FY 1996
Row River	11,257	completed FY 1995
McKenzie River	2,178	on hold since FY 1995
Shotgun Park	277	not planned
Gilkey Creek	375	not planned
Eugene Extensive Recreation Management Area	281,000	Mohawk plan completed FY 1998. Remainder not planned.

18. Timber Resources

TR#1 - By land use allocation, how do timber sale volumes, harvested acres, and the age and type of regeneration harvest stands compare to the projections in the SEIS/ROD Standards and Guidelines, and RMP?

The formal third year evaluation, which is to be completed later this year, will compare these for fiscal years 1995 through 1998. These parameters are much lower than anticipated due to the August 2, 1999 ruling by Judge Dwyer that stopped sales in FY 1999.

TR#2- Were the silvicultural (e.g., planting with genetically selected stock, fertilization, release, and thinning) and forest health practices anticipated in the calculation of the expected sale quantity implemented?

The silvicultural and forest health practices anticipated in the calculation of the expected sale quantity were implemented. The annual average for FY 1996-1998 is 8,535 acres of silvicultural treatments. The number of acres accomplished in some silvicultural practices vary from the assumed average annual acres. The acres of vegetation control and precommercial thinning exceeded the assumed average annual acres. The acres of planting genetically improved stock, fertilization, and pruning are less than the assumed average annual acres. The location and quantity (acres) of silvicultural treatments accomplished in any year depend on an analysis of the need for silvicultural treatment and the level of available funding. The acres of accomplishment will vary from year to year. The assumed average annual acres is an estimate of the average quantity for each year in the decade. Monitoring is done to check if the accomplishments reflect the assumptions.

Monitoring of silvicultural treatments was conducted in FY 1999. This review compared accomplishment acres to the assumed average annual acres and resulted in revised projections.

New projections for the average annual acres were developed based on updated information. The revised projections average annual acres are shown below.

19. Special Forest Products

SFP #1 - Is the sustain ability and protection of Special Forest Product resources ensured prior to selling Special Forest Products?

To help sustainability of SFP, the District has not allowed harvesting within Riparian Reserves, and has not allowed harvest of mosses in LSRs pending the completion of a District wide EA (Environmental Assessment) for the Special Forest Products Program. The research project implemented by Oregon State University (OSU) for the study of recovery rates of mosses after harvest has been concluded, and a decision is pending to determine if moss harvesting will continue.

SFP #2 - What is the status of the development and implementation of specific guidelines for the management of individual Special Forest Products?

Table 51 - Summary of Silvicultural Treatments (Average, Assumed, and Revised Projections)

Silvicultural Practices	Average Annual Acres (1996-1999)	Assumed Average Annual Acres (From ROD Table 1)	Revised Projections Average Annual Acres
Site Preparation prescribed fire	70	1070	80
Site Preparation - other	499	350	350
Vegetation Control	1003	340	1100
Animal Damage Control	583	600	500
Precommercial Thinning	3975	590	1990
Brushfield/Hardwood Conversion	8	50	50

20. Noxious Weeds

NW #1 - Are noxious weed control methods compatible with Aquatic Conservation Strategy Objectives?

Manual control methods are compatible with Aquatic Conservation Strategy Objectives in that they maintain the chemical integrity of the ecosystem. Noxious weeds could cause increased sedimentation because of their capability to alter the species composition and understory structure allowing for elevated rates of surface erosion.

21. Fire and Fuels Management

FM#1 - What is the status of the preparation and implementation of fire management plans for Late-Successional Reserves and Adaptive Management Areas?

No change on LSRs from last year.

FM#2 - Have additional analysis and planning been completed to allow some natural fires to burn under prescribed conditions?

No. None is planned as the District's broken land ownership pattern does not lend itself to prescribed natural fire.

FM#3 - Do wildfire suppression plans emphasize maintaining Late-Successional habitat?

Yes. Both the Southern Oregon Coast Province fire plan and the Southern Oregon Cascade Province fire plan emphasize maintenance of Late-Successional habitat.

FM#4 - Are Wildfire Situation Analysis being prepared for wildfires that escape initial attack?

Yes. One wildfire escaped initial attack in 1999. A Wildfire Situation Analysis was prepared for the Austa Fire in the Coast Range Resource Area.

FM#5 - What is the status of the interdisciplinary team preparation and implementation of fuels hazard reduction plans?

Site prep (including fuel hazard reduction) is discussed by project IDTs. If the District fuels specialist determines from on-site investigation that modifications to the project design are warranted, the IDT discusses proposed modifications and presents a recommendation to the Field Manager.

Work on the Eugene District/Willamette National Forest Integrated Natural Fuels Management Strategy (INFMS) was started in FY 1999 with a completion date of March 2000. When completed INFMS will provide the ground work for identifying fuels reduction priorities and potential project areas to be analyzed by the IDTs.

FM#1 - What is the status of the preparation and implementation of fire management plans for Late-Successional Reserves and Adaptive Management Areas?

FM#2 - Have additional analysis and planning been completed to allow some natural fires to burn under prescribed conditions?

FM#3 - Do wildfire suppression plans emphasize maintaining late-successional habitat?

FM#4 - Are Wildfire Situation Analyses being prepared for wildfires that escape initial attack?

FM#5 - What is the status of the interdisciplinary team preparation and implementation of fuel hazard reduction plans?

Ongoing ID teams work on projects such as timber sales, PCT, etc. No IDT work has taken place on fuel hazard reduction in natural fuels within the Eugene District. None planned at this time.

Insert #5

APPENDIX C
MONITORING - Project Level Questions for FY99

1. SEIS/SPECIAL ATTENTION SPECIES (SURVEY & MANAGE/PROTECTION BUFFER SPECIES)

Initial Question: Are surveys for special attention species required, being conducted, or are known sites of special attention species on or adjacent to the project location(s)? (*includes survey and manage 1 and 2 or protection buffer species*)

YES __X__ NO _____ N/A _____

Pataha
Upper Wolf
Whittaker Creek
Tucker 2

Surveys for red tree voles were conducted, but no nests were confirmed (EA, pg 5). No sites of other S&M species are known to exist in project area. Decision record predates need to survey for S&M Component 2 species and Interim Guidance on red tree voles.

YES____ NO __X__ N/A ____

Gowdyville
Decision predates S&M survey requirements
Buck Stockpile
Stockpile site is an existing site; no S&M/PB habitat
Snag Creation
McKenzie precommercial thinning

If no or N/A, skip to next section.

S&M #1 - Are surveys for species, and associated habitats, listed in Appendix B being conducted prior to all ground disturbing activities as directed in the SEIS/ROD?

YES __X__ NO ____ N/A____

Pataha,
Whittaker Creek

YES____ NO _____ N/A __X__

Upper Wolf
Tucker 2
SEE ABOVE

Are surveys being completed for the red tree vole as per Interim Guidance (Red Tree Vole/ BLM-Instruction Memorandum No. OR-97-007).

YES __X__ NO ____ N/A ____

Upper Wolf
No surveys were required according to the interim guidance. See below.
Pataha
Whittaker Creek

YES____ NO __X__ N/A____

Tucker 2
Project predates the Interim Guidance

For species where approved protocols have been developed, are surveys being implemented in compliance with approved protocols?

YES __X__ NO ____ N/A ____

Pataha
Whittaker Creek

YES ____ NO____ N/A __X__

Upper Wolf, see below.
The timber sale Decision Record was signed on **5/22/97** and was offered for sale and sold on **6/26/1997**. Based on the Interim Guidance for the implementation of Survey and Manage Component 2- Survey prior to ground disturbing Activities (IM OR 97-007); these dates place this sale within the "pre-transition period" under which no surveys are required for Survey and Manage Component 2 species.

Field reviews for botanical resources were conducted in the spring of 1993. No federally listed threatened or endangered or proposed plant species were located during those surveys. There are no known sites in the project area of Survey and Manage Component 1 or Protection Buffer species.

Surveys for special status amphibians and reptiles were conducted. On April 11, 1996 a larval Variegated Salamander (*Rhyacotriton variegatus*) was found at the confluence of the stream that passes between Unit 4 and 5 and a smaller stream southeast of Unit 4. This location is northeast of Unit 5 within the riparian reserve of Swamp Creek. This species is a former Federal Candidate in category 2 and is now treated as a Bureau Sensitive species.

A search for special status mollusks, which are also survey-and-manage species (interagency ROD Table C-3), was conducted. Two special status species were detected. A special status species of land snail, the Oregon Megomphix (*Megomphix hemphilli*), was found at five locations within the Riparian Reserves between Swamp Creek and Unit #3 and at four locations within Unit 5.

The blue-gray Tail-dropper, a slug (*Prophysaon coeruleum*), was detected at one location adjacent to Unit 5.

Field surveys for the red tree vole (interagency ROD Table C-3) have not been conducted because the survey protocol has not been finalized. The Wolf Creek Watershed met the minimum red tree vole threshold habitat interim guidance requirements (potential habitat sufficient for dispersal); therefore, no site specific surveys are needed before ground-disturbing activities. (BLM Instruction Memorandum No. OR-97-009)

S&M#2 - Are protection buffers being provided for specific rare and locally endemic species and other species in habitats identified in the SEIS/ROD? (*Refers to Survey and Manage Strategy 1 Species and Protection Buffer species; pages 145-153?)*

YES _X_ NO ____ N/A____

Pataha
Whittaker Creek
Upper Wolf
The blue-gray tail-dropper (*Prophysaon coeruleum*) adjacent to Unit 5 was protected by a buffer. Also in Unit 5 the Oregon Megomphix (*Megomphix hemphilli*) sites were protected with small patch-like buffers using the strategic location of the green retention trees. These green retention trees were retained to provide legacy trees to be carried on into the next rotation and would eventually become snags or CWD.

Design features to protect existing down wood, along with Riparian Reserves and protective stream buffers, should also contribute to the extent of habitat available for these species.

Field reviews for botanical resources were conducted in the spring of 1993. No federally listed threatened or endangered or proposed plant species were located during those surveys. There are no known sites in the project area of Survey and Manage Component 1 or Protection Buffer species.

S&M#3 - Are sites of amphibians, mammals, bryophytes, mollusks, vascular plants, fungi, lichens, and arthropod species listed in Appendix B being protected?

YES _X_ NO____ N/A____

Pataha
Whittaker Creek
Upper Wolf

The blue-gray tail-dropper (*Prophysaon coeruleum*) adjacent to Unit 5 was protected by a buffer. Also in Unit 5, the Oregon Megomphix (*Megomphix hemphilli*) sites were protected with small patch-like buffers using the strategic location of the green retention trees. These green retention trees were retained to provide legacy trees to be carried on into the next rotation and would eventually become snags or CWD.

Design features to protect existing down coarse wood, along with Riparian Reserves and protective stream buffers should also contribute to the extent of habitat available for these species.

Adults and larvae of the variegated Salamander (*Rhyacotriton variegatus*) were confined to the immediate vicinity of perennial 1st order streams and would not be negatively impacted by the proposed action.

Field reviews for botanical resources were conducted in the spring of 1993. No federally listed threatened or endangered or proposed plant species were located during those surveys. There are no known sites in the project area of Survey and Manage Component 1 or Protection Buffer species.

2. SPECIAL STATUS SPECIES

Initial Question: Are Special Status Species present in the project area or within the zone of influence of a project?

YES _X_ NO ____ N/A ____

Tucker 2
Botrychium virginianum (a Eugene District Review species) was found near the SE corner of the project area within the Riparian Reserve for Tucker Creek (EA, pg 5). Project area is not within critical habitat of any threatened or endangered species, nor is it within the 1.5 mile radii home range of any northern spotted owl sites (EA, pg 5).

Snag Creation
Unknown, but probable
Gowdyville
The harvest unit is within the 1.5 mile radii home range of three northern spotted owl sites.
Whittaker Creek
Upper Wolf
See mollusk and amphibian locations described above under Special Attention Species.

Due to lack of suitable habitat, surveys were not necessary for the marbled murrelet.

These units are within two spotted owl provincial home ranges. Unit 1 of this sale is located 1/4 mile from a spotted owl site center but, due to a ridge between this unit and the site center, no disturbance to the owl is expected to occur.

Coho salmon, steelhead, and cutthroat trout spawning and rearing habitat are available in Wolf Creek and Swamp Creek. Fish habitat is available in lower parts of the tributaries to Wolf Creek and Swamp Creek, primarily downstream from the project area. Swamp creek, a 4th order fish-bearing stream, flows south between the proposed regeneration harvest Unit 3 and Units 4 and 5. Cutthroat trout were found in the lower reaches of the tributaries to Wolf Creek near the southeast corner of Unit 1. Steep gradients at approximately 200 feet likely stop migration to upstream habitat where no fish were found in the tributary.

YES____ NO __X N/A ____

Pataha
Buck Stockpile
McKenzie precommercial thinning

If no or N/A, skip to next section.

SSS #1 -Are Special Status Species being addressed in deciding whether or not to go forward with forest management and other actions?

YES __X NO____ N/A ____

Gowdyville
See EA, pages 7, 8-9, and 11-12.
Snag Creation
Whittaker Creek
Upper Wolf

Consultation with the USFWS occurred for the northern spotted owl, marbled murrelet, and bald eagle. The Biological Opinion issued from the USFWS considered the proposed action "Likely to Adversely Affect" the northern spotted owl; however, they issued a "No Jeopardy" response. The Biological Opinion issued from the USFWS considered the proposed action a "No Effect" to the marbled murrelet and bald eagle due to the lack of suitable habitat.

Consultation with the National Marine Fisheries Service (NMFS) occurred. The BiologicalOpinion received from NMFS stated that the proposed sale would be "Likely to Adversely Affect" the anadromous fish due to a possible short-term increase in sedimentation and decrease in cover; however, they issued a "No Jeopardy" response. Riparian Reserves, protective stream buffers, and directional felling were all design features of the project to maintain water quality, cover, and streambank stability to the benefit of fish.

YES____ NO __X N/A ____

Tucker 2
Because the *Botrychium* was found within a Riparian Reserve, no other actions were necessary to protect the site.

SSS #5 - During forest management and other actions that may disturb Special Status Species, are steps taken to adequately mitigate disturbances?

YES __X NO ____ N/A____

Gowdyville
Falling and yarding were not permitted during the sap flow period (EA, pg 3), including from March 15 through June 30 (timber sale contract, Section 41, pg 2).

This protected possible active nests within the home ranges of owls from disturbance during critical nesting periods.

Snag Creation
The project was implemented in the winter season to avoid conflicts with critical nesting periods of threatened or endangered species.

Whittaker Creek
Buffering identified sites, timing of implementation to avoid conflicts, and limiting actions that would likely effect.

Upper Wolf, Unit 1 of this sale is located 1/4 mile from a spotted owl site center but, due to a ridge between this unit and the site center, no disturbance to the owl was expected to occur. This ridge would buffer any audio disturbance that would occur as a result of the operation. No seasonal restrictions were required for the project. The timber sale met the mandatory terms and conditions of the B.O. necessary to prevent disturbance to the northern spotted owl during the nesting season.

The presence of mollusks, as described above in previous questions, resulted in areas with protective buffers and design features to address retention of hardwoods and the protection of existing down wood during logging and site preparation for tree planting. These design features combined with Riparian Reserves and protective stream buffers contribute to the habitat available for these Special Status Species.

Design features included measures to protect existing large down wood and snags; measures (additional green tree retention) to provide for additional large down wood and snags; and measures to retain residual large standing trees, and species diversity. Design features included measures to minimize soil disturbance and disturbance to streams and streambanks to provide for water quality. No silvicultural treatments (regen harvest or thinning) occurred within Riparian Reserves adjacent to Units 3, 4 and 5 to protect fish and aquatic habitats, water quality, and known mollusk sites. Thinning treatments within Riparian Reserves (adjacent to Unit 1) were included to accelerate the development of large trees for future instream structure and for late-successional habitat while maintaining protective stream buffers to provide for streambank stability and water quality. Road closures (includes barricades, water bars, andsubsoiling methods) were also included to decrease disturbance to wildlife, to contribute to the maintenance of water quality, and to contribute to a reduction in road density within the area.

3. SPECIAL AREAS

Initial Question: Are special areas in or adjacent to the project location(s)? *Includes ACEC, RNA, ONA, EEA*

YES____ NO _X_ N/A ____

Upper Wolf
Tucker 2
Whittaker Creek

Gowdyville
Pataha
Buck Stockpile
Snag Creation
McKenzie precommercial thinning

If no or N/A, skip to next section.

SA#1 - Are BLM or authorized actions consistent with RMP objectives and management direction for Special Areas?

YES ____ NO _____ N/A _____

SA#5 - Are existing BLM actions and BLM authorized actions and uses not consistent with management direction for Special Areas being eliminated or relocated?

YES____ NO ____ N/A _____

SA#3 - Are the outstanding values of the ONAs being protected from damage?

YES _____ NO ____ N/A _____

If not identify problems:

4. RIPARIAN RESERVES

Initial Question: Are Riparian Reserves contained within or adjacent to the project location(s), or is the project within a Riparian Reserve?

YES __X__ NO _____ N/A _____

Tucker 2
Riparian Reserves are adjacent to the project area; EA states that two yarding corridors may be needed on the outer edges of two Riparian Reserves.
Gowdyville
Whittaker Creek
Buck Stockpile
Snag creation
Upper Wolf
There are Riparian Reserves adjacent to the treatment areas. Thinning treatment within Riparian Reserves (adjacent to Unit 1) was included to accelerate the development of large trees for future in-stream structure and for late-successional habitat while maintainingprotective stream buffers to provide for streambank stability and water quality.

YES____NO __X__ N/A____

Pataha
McKenzie precommercial thinning

RR #1 - Are watershed analysis being conducted before on-the-ground actions are initiated in Riparian Reserves ?

YES __X__ NO ____ N/A ____

Tucker 2
Upper Siuslaw Watershed Analysis completed in 1996.
Upper Wolf
Snag creation
Whittaker Creek

YES____ NO ____ N/A _X_

Gowdyville
No activities were planned for Riparian Reserves
Buck Stockpile
Siuslaw Watershed Analysis completed in 1996; predates this action, but was not initiated because of this action.

RR #2 - Is the width and integrity of the Riparian Reserves being maintained? *For example, did the conditions that existed before management activities change in ways that are not in accordance with the SEIS/ROD Standards and Guidelines, and RMP management direction?*

YES _X_ NO____ N/A ____

Tucker 2
The two yarding corridors through the outer edges of two Riparian Reserves were not anticipated to have any appreciable impact to the integrity of the reserves. In addition, all trees felled for corridors in the reserves were retained on-site as DWD. In one memo to the file, the sale administrator noted that the operator was able to set up and use a yarding corridor through the northern Riparian Reserve without falling any trees within the reserve.

Gowdyville
Upper Wolf
Whittaker Creek
Buck Stockpile
No change in size of the existing stockpile site.

RR #3 - What silviculture practices are being applied to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy objectives.

Tucker 2
Any trees felled for the proposed yarding corridors in the Riparian Reserves were to be left on-site as DWD.
Whittaker Creek
None as of this date. Planned riparian conversions to occur in future years.

Upper Wolf - a thinning treatment (density management) of approximately 5-6 acres within Riparian Reserves (adjacent to Unit 1) was included to accelerate the development of large trees for future in-stream structure and for late-successional habitat while maintaining protective stream buffers to provide for streambank stability and water quality. (The density management prescription provided for leave tree retention in the Riparian Reserve thinning averaging 130-140 sq. ft. per acre of basal area. The prescription provided for the retention of a range of tree species and diameter classes; and provided for all hardwoods, all Pacific yew, and conifer species greater than 28" DBH to be retained in the Riparian Reserve to maintain diversity.

RR #4 - Are management activities in Riparian Reserves consistent with SEIS/ROD Standards and Guidelines, RMP management direction, and ACS Objectives.

YES __X__ NO ____ N/A ____

Upper Wolf
Tucker 2
Whittaker Creek

YES____ NO____ N/A __X__

Buck Stockpile
Action does not change size or use of existing site

RR #5- Are new structures and improvements in Riparian Reserves constructed to minimize the diversion of natural flow, reduce sediment, protect fish and wildlife, and accommodate a 100 year flood event?

YES __X__ NO____ N/A____

Whittaker Creek

RR #6 - a. Are all mining structures, support facilities, and roads located outside the Riparian Reserves?

YES __X__ NO____ N/A____

Upper Wolf

YES____ NO __X__ N/A____

Whittaker Creek
Temporary access trails provide access for instream work

RR #6 - b. Are those located within the Riparian Reserves meeting the objectives of the Aquatic Conservation Strategy?

YES ____ NO __X N/A ____

Whittaker Creek
Neutral to ACS objectives in long-term

RR#6 - c. Are all solid and sanitary waste facilities excluded from Riparian Reserves or located, monitored, and reclaimed in accordance with SEIS/RODStandards and Guidelines and RMP management direction?

YES____ NO ____ N/A

RR #7 - Are new recreation facilities within Riparian Reserves designed to meet and, where practicable, contribute to ACS objectives?

YES____ NO____ N/A

Are mitigation measures initiated where existing facilities are not meeting ACS objectives?

YES____ NO____ N/A ____

5. LATE-SUCCESSIONAL RESERVES

Initial Question: Is the project located within or adjacent to a LSR?

YES __X NO____ N/A ____

Pataha
Buck Stockpile
Snag Creation
Whittaker Creek

YES____ NO __X N/A ____

Upper Wolf
Tucker 2
Gowdyville
McKenzie precommercial thinning

If no or N/A, skip to next section.

LSR #1 - What is the status of the preparation of assessment and fire plans for Late-Successional Reserve where the project is located?

Buck Stockpile
LSR Assessment for the Oregon Coast Province, Southern Portion, was completed in October 1996.

Snag creation, Whittaker, and Pataha
The LSR Assessment was approved by the REO in June 1997. Resource protection and maintenance of existing late-successional habitat are primary goals of suppression action. Prescribed fire will be considered where appropriate for meeting LSR objectives in areas of low risk. This does not apply to this project however.

LSR #2 - a. What activities were conducted or authorized in LSRs, and how were they compatible with the objectives of the LSR Assessments?

Buck Stockpile
The activity authorized was a temporary use permit (TUP) to stockpile gravel in an existing BLM stockpile site. The LSR-A refers to the NSO ROD S&Gs at C-17 as the appropriate management ciriteria for "other" activities in this LSR. The NSO ROD at C-17 states under the "Developments" heading: "Existing developments . . . are considered existing uses withrespect to Late-Successional Reserve objectives, and may remain, . . .

Snag Creation
Both the watershed analysis and the LSR Assessment identified an inadequate level of snags throughout the project area.

Whittaker Creek
Consistent with the LSR Assessment's ACS needs (Table 7) approved by the REO, appropriate management actions to reduce sediment and restore hydrologic function include road closure, culvert replacement, create stream channel complexity, placement of CWD in channels, etc. (page 45, LSR Assessment).

Pataha
As identified in the EA for this project in July 1995, the BLM submitted a project request to the REO on management of the progeny test sites, which was subsequently referred to the Research and Monitoring Committee (RMC). The RMC reviewed the ongoing progeny test site plantation activities and concluded that, while some activities are inconsistent with the S & Gs, the activities are appropriate under the research exception, and the RMC recommended that the activities proceed as proposed. The REO evaluated the RMC report and concluded that the review did not identify any unacceptable risks to the objectives of the S & Gs that would require modification or cancellation of the project.

b. Were the activities consistent with SEIS/ROD Standards and Guides, RMP management direction, REO review requirements, and the LSR assessment?

YES __X__ NO____ N/A____

Pataha
Buck Stockpile
Whittaker Creek
Snag Creation

6. ADAPTIVE MANAGEMENT AREAS

Initial Question: Is the project located partly or completely within an Adaptive Management Area?

YES____ NO __X N/A____

Upper Wolf
Pataha
Snag Creation
Gowdyville
Tucker 2
Buck Stockpile
Whittaker Creek
McKenzie precommercial thinning

If no or N/A, skip to next section.

AMA #2 - Is the project in accordance with the AMA plan in place or being developed, and does it contribute to establishing future desired conditions?

YES____ NO ____ N/A ____

7. MATRIX

Initial Question: Is the project located within or partly within the Matrix land allocation?

YES __X NO ____ N/A ____

Upper Wolf
Tucker 2
Gowdyville
McKenzie precommercial thinning

YES____ NO __X N/A ____

Pataha, Buck Stockpile
Snag Creation,
Whittier Creek

If no or N/A, skip to next section.

MA #1 - Are suitable numbers of snags, coarse woody debris, and green trees being left in a manner that meets the needs of species and provides for ecological functions in harvested areas as called for in the SEIS/ROD Standards and guidelines and RMP management direction?

YES __X NO ____ N/A ____

Tucker 2
EA (pg 3) states that GTR would be between 12-18 TPA, to include at least 12 conifers and 3 large hardwoods where available. In addition, the EA stated that an additional 3 conifer TPA would be retained for future coarse woody debris and another 1.5-1.7 conifer TPA would be retained for snag recruitment. Thus, the minimum number of conifers retained for the entire 49-acre harvest would be 809 trees. According to the information in the planning file, 774 conifer trees were retained. This is 35 trees fewer than specified by the EA, but the deficiency is less than one tree per acre.

The EA also specified that up to 3 hardwood TPA would be retained where available. This would equate to 147 hardwood trees retained. Information in the planning file indicates that there were 249 hardwoods retained, thus exceeding the minimum by 69%.

Upper Wolf
The design features provided for six to eight green trees per acre of size and species typical of the stand to be retained to provide legacy trees. These trees are to be carried on into the next rotation and would eventually become snags or CWD.

The design features provided for retaining all existing coarse woody debris within the commercial thinning areas. The design features within the regeneration harvest areas provided for the ROD standard of retaining a minimum of 240 lineal feet of material greater than or equal to 20 inches in diameter of Decay Class 1 and 2. Since the regeneration harvest pre-project areas had little existing 20 inch down material, the design features provided for 3 additional trees/acre to be reserved to provide for future down material and provided for the retention of all pre-harvest down material greater than 10 inches (at the large end).

The design features provided for all existing snags not posing a safety hazard to be reservedin both the commercial thinning units and the regeneration harvest units. (Where snags created a hazard, they were to be cut and left on site for CWD.) The existing number of snags in the pre-regeneration harvest areas were found to be below the minimum RMP/ROD standards to meet the primary cavity nesting bird needs. Based on this information, the design features provided for approximately 1.7 additional green trees per acre (at least 15" DBH) to be retained in the regeneration harvest units to meet the 40% primary cavity nester requirements.

YES____ NO ____ N/A _X

Gowdyville
McKenzie Precommercial thinning
Action is not a regeneration harvest

MA #2 - Are timber sales being designed to meet ecosystem goals, as specified in the Eugene ROD, for the Matrix LUA?

YES _X NO ____ N/A____

Tucker 2
Additional green trees were retained to provide for a future supply of snags and down wood.

Gowdyville
This density management thinning was designed in part to promote diameter growth, canopy layering, structural characteristics, and stand development toward a later seral state (EA, pg 2). Action included moderate and heavy thinning. In heavy thinning areas, underplanting is to occur to allow for canopy layering and species diversity.

Upper Wolf
(See the proposed action and design features on pages 3-7 of the EA).

MA #3 - Are late-successional stands being retained in 5th field watersheds in which Federal forest lands have 15% or less late-successional forest?

YES _X_ NO____ N/A ____

Upper Wolf
This action was located in the Wolf Creek Watershed. The approximate age of the stands that received a regeneration harvest with this action was 70 - 76 years old. Of the 16,687 acres of BLM administered land within the Wolf Creek Watershed, approximately 4,469 acres (27%) are in a late-successional condition (i.e., 80 years old). *(Documented in the EA)* and (*Wolf Creek Watershed Analysis, Feb. 1995*). These late-successional stands are all being retained. Approximately 10,888 acres of the Wolf Creek Watershed are designated to be managed as Late-Successional Reserve (LSR). This is approximately one third of the total watershed area and over 65 percent of the BLM ownership in the watershed. *(Documented in the EA)* and (*Wolf Creek Watershed Analysis, Feb. 1995*)

YES ____ NO ____ N/A _X_

Tucker 2
Project did not involve late-successional stands

Gowdyville
Action does not affect late-successional stands.

McKenzie precommercial thinning:
Late-successional forest not involved.

8. AIR QUALITY

Initial Question: Is the project expected to have effects on Air Quality, *including burning or dust creation.*

YES _X_ NO____ N/A____

Tucker 2

YES____ NO _X N/A____

Upper Wolf
Buck Stockpile
Pataha
Snag Creation
Whittier Creek
Gowdyville
McKenzie precommercial thinning

If no or N/A, skip to next section.

AQ #1 - Were efforts made to minimize the amount of particulate emissions from prescribed burns?

YES _X NO____ N/A ____

Tucker 2
Burning is to be completed after onset of fall rains.

AQ #2 - Are dust abatement measures used during construction activities and on roads during BLM timber harvest operations and other commodity hauling activities?

YES____ NO ____ N/A ____

AQ #3 - Are conformity determinations being prepared prior to activities that may contribute to a new violation of the National Ambient Air Quality Standards, increase the frequency or severity of an existing violation, or delay the timely attainment of a standard?

YES____ NO____ N/A _X

Tucker 2
Pile burning is not expected to affect air quality in the Designated Smoke Management Area (Eugene/ Springfield).

9. WATER AND SOIL

Initial Question: Is the project expected to have effects on soil and water?

YES _X NO N/A

Tucker 2
Whittaker Creek
Gowdyville
Upper Wolf

The project was expected to have negligible effects on soil. The design features of the proposed action (protective stream buffers) were expected to maintain current water quality. The thinning in Riparian Reserve is expected to accelerate growth of large trees within the riparian for future sources of in-stream structure, which could improve water quality and stream function in the long-term.

The Biological Opinion received from the National Marine Fisheries Service (NMFS) in regard to fish expected a possible short-term increase in sedimentation and decrease in cover. *(Documented in EA)*

YES____ NO __X N/A____

Pataha
Buck Stockpile
Snag Creation
McKenzie precommercial thinning

If no or N/A, skip to next section.

S&W #1 - Are site-specific Best Management Practices (BMP) identified as applicable during interdisciplinary review and carried forward into project design and execution?

YES __X NO____ N/A____

Tucker 2
See EA, page 2
Gowdyville
Project design features include BMPs, but are not identified in the EA or IDT agreement as such. These included directional falling to protect Riparian Reserves and wetlands, no yarding through Riparian Reserves or wetlands, outsloping new roads, no yarding or log hauling on natural surface roads during periods of wet weather, and subsoiling roads after harvest operations were complete (EA, pg 3).

Whittaker Creek
Upper Wolf
BMPs were identified as applicable during ID team review and carried forward into project design and execution; however, some unanticipated soil compaction occurred adjacent to haul roads as described below. Planned project design features documented in the EA included maintaining lead end log suspension, seasonal tractor restrictions, water barring and sub-soiling of designated skid trails occupying 10% or less of yarded area, and designated dirt spurs for summer yarding within the project area.

Sufficient litter and logging debris were retained in most areas to maintain soil organic material, soil organisms, and nutrient levels. Growth impairing soil disturbance was negligibleover most of the project area. However, soil compaction did occur adjacent to haul roads on the broad ridgetops within the project area. The factors that contributed to the soil compaction appear to be **off-road use of heavy equipment** (skidder operations or off road tractor piling of the yarding debris) concurrent with winter yarding (wet season) adjacent to haul roads; and/or the **use or set-up of a wood processor off-road** during the wet season).

The Contract Administrator required the Purchaser to loosen the soil in the compacted areas with a brush rake. This action is expected to mitigate the soil compaction to a negligible level. If planting is not successful due to the compaction, then BLM will do further subsoil the following dry season.

In addition to the "no off-road use of heavy equipment during the wet season" BMP, possible additional remedies or ID team considerations to reduce off-road compaction on future projects could be the following: use of predesignated landings or limiting the number of landings on broad flat ridgetops that invite this type of disturbance; and/or limiting the conditions of use of wood processors (to the dry season or to specified locations) if this type of soil disturbance is typically associated with their use.

There was a post-EA decision by the ID team to give the Purchaser a requested option to rock some initially planned dirt roads (Spurs A, B, and C) to allow for winter logging in some areas of the sale that were initially planned for summer logging. In conjunction with this decision, the ID team also decided not to subsoil these three spurs since their future access is blocked by a planned barricade at the junction of the Road No. 19-6-9.8 with the 4.1 road, and some administrative use of these roads may be required in the future due to their location within the Matrix. The Purchaser requested not to use the planned Spur D for logging purposes; however, the Purchaser later decided this spur would be needed.

End of Spur A developed some ponding of water due to lack of drainage and heavy use by tracked machinery. This was mitigated by the purchaser constructing some drainage ditches with an excavator in the dry season. Spur A was watermarked as required. Spurs A, B, and C and the 19-6-9.8 haul roads received some logging damage that was mitigated by shaping and water barring. Spur D was subsoiled by BLM during dry soil conditions after the sale was completed.

S&W #2 - What watershed analyses have been or are being performed?

Tucker 2
Upper Siuslaw WA, 1996
Gowdyville
The action lies within three 5th field watersheds: Siuslaw, Upper Coast Fork Willamette, and Long Tom. At the time the EA and Decision Record were completed, only the Siuslaw WA had been completed. However, since there were no activities within Riparian Reserves, watershed analyses were not required.

Whittaker Creek
Esmo-Whitt Subwatershed Analysis June 1998; An Addendum to the Siuslaw Watershed Analysis (February 1996).

Upper Wolf
Watershed analysis for the Wolf Creek Watershed was completed in February 1995 and listed commodity production within Matrix lands and density management in Riparian Reserves to achieve ACS objectives as opportunities within the watershed.

Are watershed analyses being performed prior to management activities in Key Watersheds?

YES____ NO____ N/A____

S&W #3 - What is the status of identification of in stream flow needs for the maintenance of channel conditions, aquatic habitat, and riparian resources?

Tucker 2
None
Gowdyville
None

Whittaker Creek
Not fully assessed as discussed on page VI-59 Esmo-Whitt watershed analysis, June 1998.

Upper Wolf
Peak and average water flows outside of the project were not monitored - however, it is expected that the regeneration harvest would cause a temporary increase in stream flows during the growing season due to reduced moisture interception in the canopy layer, and would decrease annually and be close to preharvest levels in approximately 15 years. The thinning cuts were expected to show only a small increase in flows since the residual trees will use the increase in available water. Any changes in flows were expected to be small relative to the range of natural fluctuation due to storm variation.

10. WILDLIFE HABITAT

Initial Question: Is the project expected to have effects to Wildlife Habitat?

YES _X_ NO____ N/A____

Whittaker Creek
Tucker 2
Gowdyville,
Snag Creation
Upper Wolf

Commercial Thinning
The proposed thinning is within one known northern spotted owl provincial radius. This thinning action provides for dispersal habitat as the residual canopy closure would likely be above 50 percent. No negative impacts to the marbled murrelet or to its existing habitat are expected as this timber sale did not contain any trees suitable for murrelet nest sites.

Regeneration Harvest
Spotted owl potential habitat was locally reduced as a result of the proposed action. However, it would not have a significant negative impact on the spotted owl population due to the Late- Successional Reserves (LSRs), which have been designed across the landscape to maintain and enhance late-successional forests as a network of habitat for late-successional forest-dependant species, including the northern spotted owl. This network of LSRs, along with the Riparian Reserves, were developed to support a sustainable and intermixing population of owls.

Consultation with the USFWS occurred for the northern spotted owl, marbled murrelet, and bald eagle. The Biological Opinion issued from the USFWS considered the proposed action "Likely to Adversely Affect" the northern spotted owl, however they issued a "No Jeopardy" response. The Biological Opinion issued from the USFWS considered the proposed action a "no effect" to the marbled murrelet and bald eagle due to the lack ofsuitable habitat.

If no or N/A, skip to next section.

WH #1 - (Same as Matrix #1) Are suitable (diameter, length, number) snags, coarse woody debris, and green trees being left in a manner that meets the needs of species and provides for ecological functions in harvested areas, as called for in the SEIS/ROD Standards and Guidelines, and RMP management direction?

YES _X_ NO____ N/A____

Tucker 2
See response to Question #MA1, above
Snag Creation
This is a snag creation project only. It is not associated with any separate action in Matrix.
Upper Wolf
Whittaker Creek
This is a stream restoration project not associated with action in the Matrix.
Gowdyville
This is a density management thinning; snags, DWD, and green tree retention requirements would be implemented at the final harvest stage.

See question number **SSS # 5** in the Special Status Species Section, and question number **MA # 1** in the Matrix Section.

WH #2 - Do Special Habitats occur in the project area?

YES____ NO _X_ N/A____

Are Special Habitats being protected?

YES NO N/A _X_

Whittaker Creek Snag Creation (no special habitats identified here)
Upper Wolf
Tucker 2
Gowdyville

11. FISH HABITAT

Initial Question: Is the project expected to have any effects on fish Habitat?

YES __X__ NO ____ N/A____

Tucker 2
Whittaker Creek
Upper Wolf
Consultation with the National Marine Fisheries Service (NMFS) occurred. The Biological Opinion received from NMFS stated that the proposed sale would be "Likely to Adversely Affect" the anadromous fish due to a possible short-term increase in sedimentation and decrease in cover; however, they issued a "No Jeopardy" response.

Riparian Reserves, protective stream buffers, and directional felling were all design features of the project to maintain water quality, cover, and streambank stability to the benefit of fish. The thinning in Riparian Reserve (5-6 acres) adjacent to Unit 1 is expected to accelerate growth of large trees within the riparian for future sources of instream structure, which should improvewater quality and stream function in the long-term.

YES____ NO _X_ N/A____

Pataha
Gowdyville
Buck Stockpile
Snag Creation
McKenzie precommercial thinning

If no or N/A, skip to next section.

FH #1 - Are at-risk fish species and stocks being identified?

YES __X__ NO ____ N/A____

Tucker 2
Coho salmon were discovered in the Siuslaw River. Streams in the project area are connected to Tucker Creek; Tucker Creek is connected to the South Fork; South Fork is connected to the Siuslaw. But no streams in the project area were fish-bearing.

Whittaker Creek
Upper Wolf
Coho salmon, steelhead, and cutthroat trout spawning and rearing habitat is available in Wolf Creek and Swamp Creek. Fish habitat is available in lower parts of the tributaries to Wolf Creek and Swamp Creek, primarily downstream from the project area. Swamp creek, a 4th order fish- bearing stream, flows south between the proposed regeneration harvest Unit 3 and Units 4 and 5. Cutthroat trout were found in the lower reaches of the tributaries to Wolf Creek near the southeast corner of Unit 1. Steep gradients

at approximately 200 feet likely stop migration to upstream habitat where no fish were found in the tributary.

FH #2 - Are fish habitat restoration and enhancement activities being designed and implemented that contribute to attainment of Aquatic Conservation Strategy (ACS) objectives?

YES _X_ NO____ N/A____

Whittaker Creek
Upper Wolf
The density management in Riparian Reserve is expected to accelerate growth of large trees within the riparian for future sources of instream structure, which should improve water quality and stream function in the long-term.

YES____ NO _X_ N/A____

Tucker 2
None within the confines of this project area.

FH #3 - Are potential adverse impacts to fish habitat and fish stocks being identified?

YES _X_ NO____ N/A____

Tucker 2
See EA, pg 5.
Whittaker Creek
Upper Wolf
Consultation with the National Marine Fisheries Service (NMFS) occurred. The Biological Opinion received from NMFS stated that the proposed sale would be "Likely to Adversely Affect" the anadromous fish due to a possible short-term increase in sedimentation and decrease in cover; however, they issued a "No Jeopardy" response.

12. CULTURAL RESOURCES INCLUDING NATIVE AMERICAN VALUES

Initial Question: Are surveys for cultural species being conducted, and/or have cultural resources been identified on or adjacent to the project location(s)?

YES _X_ NO____ N/A____

Gowdyville
Whittaker Creek

YES NO _X_ N/A____

Tucker 2
See EA, pg 6
Buck Stockpile

Pre-existing disturbed site
Pataha
Pre-project cultural resource survey is not required in the Coast Range Physiographic Province under Memorandum of Understanding with the SHPO.
Snag Creation
McKenzie precommercial thinning

YES____ NO____ N/A X

Upper Wolf
None required in the Coast Range per agreement with the SHPO.

If no or N/A, skip to next section.

CR #1 - Are cultural resources being addressed in deciding whether or not to go forward with forest management and other management actions?

YES _X NO N/A

Whittaker Creek
No sites located in project area. Cultural Resource clearance given after survey, if required; after consultation with tribes; and consistent with requirements of MOU with the SHPO.

Tucker 2
Cabin site was found during CR survey; District Archaeologist recommended it be buffered. No special buffer was needed because it was within Riparian Reserve.

YES____ NO____ N/A _X

Gowdyville
No cultural resources were found during survey (EA, pg 8).

13. VISUAL RESOURCES

Initial Question: Is the project location(s) within or adjacent to Visual resource Class II or Class III designations?

YES _X NO____ N/A ____

Snag Creation
Whittaker Creek

YES____ NO _X N/A____

Upper Wolf
Pataha
Tucker 2

Gowdyville
Buck Stockpile
McKenzie precommercial thinning

If no or N/A, skip to next section.

VR#1 - Are design features and mitigation being included in project to preserve or retain the existing character of the landscape in VRM Class II or VRM Class III management areas.

YES _X_ NO____ N/A ____

Snag Creation
Snags are a natural component of the local ecosystem and do not conflict with the VRM classes. This project enhances the visual quality of the area.

Whittaker Creek

14. WILD AND SCENIC RIVERS

Initial Question: Does the project effect the ORVs of any designated suitable and eligible river?

YES____ NO _X_ N/A ____

Upper Wolf
Pataha
Whittaker Creek
Snag Creation
Tucker 2

McKenzie precommercial thinning
Buck Stockpile
Gowdyville

If no or N/A, skip to next section.

WSR#1 - Is project consistent with protection of the ORVs of the designated suitable and eligible river?

YES____ NO____ N/A____

15. RURAL INTERFACE AREAS

Initial Question: Is the project located in or adjacent to a Rural Interface Area?

YES____ NO__X_ N/A ____

Upper Wolf
Pataha
Whittaker Creek

Snag Creation
Tucker 2
Gowdyville
Buck Stockpile
McKenzie precommercial thinning

If no or N/A, skip to next section.

RIF #1 - Are design features and mitigation measures developed and implemented to avoid/minimize impacts to health, life, property, and quality of life and to minimize the possibility of conflicts between private and Federal land management?

YES____ NO ____ N/A ____

16. SOCIOECONOMIC CONDITIONS

Initial Question: Has the project been designed to enhance local communities or support local economies?

YES _X NO____ N/A____

Whittaker Creek McKenzie precommercial thinning
Upper Wolf Tucker 2
Gowdyville

YES____ NO _X N/A ____

Pataha Buck Stockpile
Snag Creation

If no or N/A, skip to next section.

SC#3 - What design features have been implemented?

Tucker 2
Provide forest products to local mills
Gowdyville
Provide forest products to local mills
Whittaker Creek
Jobs-in-the-Woods funding supports local communities through project equipment, materials, and personnel procurement.
Upper Wolf
See *pages 5-7 of the EA.* Design features address an array of resource concerns and are consistent with the objectives of Matrix, which includes a sustainable supply of forest products.

17. RECREATION

Initial Question: Is this a recreation project?

YES____ NO _X_ N/A ____

Upper Wolf
Pataha
Whittaker Creek
Snag Creation
Tucker 2
Gowdyville
Buck Stockpile
McKenzie precommercial thinning

If no or N/A, skip to next section.

RN#1 - Provide description of project and how this project has contributed to the range of developed and dispersed opportunities that contribute to meeting expected recreation demand.

Narrative:

18. TIMBER RESOURCE

Initial Question: Is the project a timber sale or silvicultural project?

YES _X_ NO____ N/A ____

Upper Wolf
McKenzie precommercial thinning
Tucker 2
Gowdyville
Pataha

YES____ NO _X_ N/A____

Whittaker Creek
Snag Creation
Buck Stockpile

If no or N/A, skip to next section.

TR#3 - Provide description of volume, harvested acres and age and type of regeneration harvest and how this compares to the projections in the SEIS/ROD S&Gs and RMP management objectives.

Tucker 2
Acres harvested = 49, which is what was projected in the EA. EA projected a harvest of 1.5 MMBF; actual volume was 1.2 MMBF. Type of regeneration harvest projected in EA = regeneration harvest. Actual type of regeneration harvest = regeneration harvest.

Gowdyville
Projections from EA = 1.6 MMBF, 124 acres. Stand age = 55-57 Actual volume = 2.2 MMBF; difference is mainly due to addition of a small blowdown salvage area added to thissale, and through contract modifications for R/Ws and yarding corridors.

Pataha
This project was a commercial thinning (156.8 ccf volume). The project area is a progeny test site for the Eugene District Genetics Program. The progeny test site is a Douglas-fir stand 27 years of age. The Objectives of the forest genetics program are explained in Appendix M of the RMP.

Upper Wolf
This project included three regeneration harvest units (Unit 3 - approx. 70 years of age and 57 acres in size; Unit 4 - approx. 76 years of age and 1 acre in size; and Unit 5 - approx. 76 years of age and 9 acres in size).

The project also included 2 commercial thinning units (Unit 1 - approx. 63 years of age and 56 acres in size; and Unit 2 - approx. 54 years of age and 5 acres in size). Unit 1 also contained approximately 5-6 acres of density management treatment within the Riparian Reserve to accelerate the growth of the remaining trees to meet long term ACS objectives.

All stands are in the Matrix LUA. Green retention trees, snags and down CWD were also retained. A total of 1,892 MBF board feet (28.24 MBF per acre) was sold for harvest within the regeneration harvest areas and a total of 1169.7 MBF board feet (18.9 MBF per acre) was sold for harvest within the commercial thinning units for a total of 3,061.7 MBF board feet for the entire sale. The actual volume removed in the regeneration harvest areas was lower than the volume projections used to determine the ASQ for the RMP. The actual volume removed in the commercial thinning areas was higher than the volume projections used to determine the ASQ for the RMP.

McKenzie precommercial thinning
This project covered 1,015 acres of Matrix LUA ranging in 12 to 20 years old.

19. SPECIAL FOREST PRODUCTS

Initial Question: Is the project harvest of Special Forest Products?

YES____ NO _X_ N/A ____

Upper Wolf
Pataha
Whittaker Creek

Snag Creation
Tucker 2
Gowdyville
Buck Stockpile
McKenzie precommercial thinning

If no or N/A, skip to next section.

SFP#3 - Describe harvest of special forest products

Narrative:

20. NOXIOUS WEEDS

Initial Question: Is the project a control of Noxious Weeds?

YES ____ NO _X_ N/A ____

Pataha
Whittaker Creek
Snag Creation
Gowdyville
McKenzie precommercial thinning
Tucker 2
Buck Stockpile

However, permit stipulations require that the rock material brought to the site by the permittee must be free from Scotch broom seed.

YES____ NO __X_ N/A ____

Upper Wolf
Road construction and ground based yarding equipment was required to be cleaned prior to use on the sale area in order to lessen the spread of noxious weeds during the implementation of the proposed action.

If no or N/A, skip to next section.

NW#1 - Was control project compatible with Aquatic Conservation Strategy Objectives?

Narrative:

21. FIRE AND FUELS MANAGEMENT

Initial Question: Does the project contain fire or fuels management features?

YES _X_ NO ____ N/A____

Upper Wolf
Tucker 2
Pataha
Gowdyville

YES____ NO _X_ N/A____

Whittaker Creek
Snag Creation
Buck Stockpile
McKenzie precommercial thinning

If no or N/A, skip to next section.

FM#6 - Describe fuels management or fire features of project.

Tucker 2
Slash was to be piled and burned. Hand-piling would occur on the harvest area except on slopes less than 40%, which would be excavator-piled. Burning was to occur after the onset of autumn rains. Memo in file from Fuels Specialist indicates that burning was accomplished on 11/8/99.

Gowdyville
(1) All slash within 10 feet of roads 20-4-35 and 20-4-35.3 was to be pulled back as directedby the authorized officer; (2) Landing slash was to be piled, covered, and burned.

Inspection report dated 10/1/99 states that slash was adequately piled and covered and that BLM would assume burning responsibilities.
Upper Wolf
For fire hazard reduction and/or site preparation purposes the resulting slash less than 10" diameter (at the large end) was gross yarded on Units 3, 4, and 5 (outside of the mollusk protection buffers). Gross yarding was spotty in some areas. The lower half of Unit 5 was hand piled and burned. Hand piling with burning was used on Unit 3 on slopes >40%. Excavator piling with burning was used on Unit 4 and Unit 3 on slopes less than 40%. One to ten percent of the debris piles were left unburned to provide wildlife habitat.

Fire hazard reduction and site prep utilized the Best Management Practices (BMPs) as described in Appendix C of the Eugene District ROD and RMP (June 1995) to minimize soil disturbance and minimize litter and course woody debris consumption.